Siyathemba Municipality

Integrated Development Plan (2014-2015)

Draft

31 March 2014 (Resolution no: 10.2 (31/03/2014)

Addendum F

Addendum G

Addendum H

Addendum I

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PREAMBLE

In accordance with the requirements as spelled out in the Local Government: Municipal Systems Act (2000), Siyathemba Municipality has embarked on a review of its integrated development plan (IDP), which was originally drafted in April 2002. This document is being reviewed on an annual basis and the following review dates can be reported 01 April 2004, 30 May 2005, 31 October 2005, 17 May 2007, 30 May 2008, 06 November 2008, 30 June 2010, 04 May 2011, 31 May 2012, 29 May 2013 and 31 March 2014 for the Draft for the 2014/15 financial year. The purpose of the review was primarily to see if it is still relevant to the needs of the people of Siyathemba as well as to identify any new opportunities that might have availed themselves. The previous version of the Siyathemba IDP, and the IDP of the Pixley Ka Seme District Municipality were used as the main source documents. Needless to say, the reviewed IDP provides a framework that will guide the delivery of services at the Siyathemba Municipality in its efforts to remain a developmental municipality. This is also the second year in which the "Simplified Format" introduced by the Department of Cooperative Governance, Human Settlements and Traditional Affairs.

The preparation of the original IDP entailed extensive consultations with the communities of the municipal area, as well as other stakeholders such as provincial, regional and local government departments, the PIMS Centre of the Pixley Ka Seme District Municipality, the different business sectors as well as other relevant stakeholders. The IDP Representative Forum played a critical role throughout this process.

As a comprehensive planning tool, it is hoped that this document will live up to the purposes for which it was meant. As a five-year planning document, the IDP leaves us with considerable hope that the considerable developmental backlogs facing Siyathemba will be addressed over this period. This tool is not only an excellent learning exercise for the municipality and its staff; but also for the entire community and the other spheres of government.

The contributions made by the different sectors in the compilation of this document are highly appreciated and it is hoped that the Municipality's partners will stay the course and remain our partners in the implementation of the IDP.

Forward by the Mayor to be Included

Piet Papier
MAYOR: SIYATHEMBA LOCAL MUNICIPALITY

1 VISION, MISSION AND CORE VALUES

Siyathemba Local Municipality has the ability to overcome its internal challenges and address the national matters like poverty, unemployment, HIV/AIDS, crime, teenage pregnancies and education. These challenges require commitment and discipline from all and an integrated government approach. Senior Management of the Siyathemba Municipality has no illusions about the challenges and is prepared to work tirelessly in meeting the high expectations of our people[1].

1.1 VISION

Siyathemba Municipality undertakes to improve the standard of living of its entire community by delivering visible and affordable services.

1.2 MISSION

To be a developmental Municipality, which has the interest of its communities at the center of all its activities.

This will be done through:

- an optimal distribution of resources
- economic development through job creation and poverty reduction strategies
- effective and efficient service delivery through optimal distribution and human resources development; and
- effective and efficient maintenance of equipment and buildings

1.3 CORPORATE CULTURE AND VALUES

It is of critical importance that every organisation, especially one that is required by legislation, be at the forefront of the development of its communities and should have appropriate and progressive culture and values.

Therefore, driven by the aspirations of the people, we pledge to respect and uphold the Constitution of the Republic of South Africa and, to this end, observe human rights and participate in co-operative governance to improve the life of all its residents. Additionally, the culture and values of the Municipality are as follows:

- We commit ourselves to the Code of Conduct for Councilors and Officials in the Municipal Systems Act 32 of 2000 and to the principles of sound financial management and provision of services;
- We subscribe to the principles of *Batho Pele*, communication with the community and the total quality of management;
- We believe in upholding integrity in the relations with all our stakeholders;

1 Mayor P Papier in Annual Report 2010-11

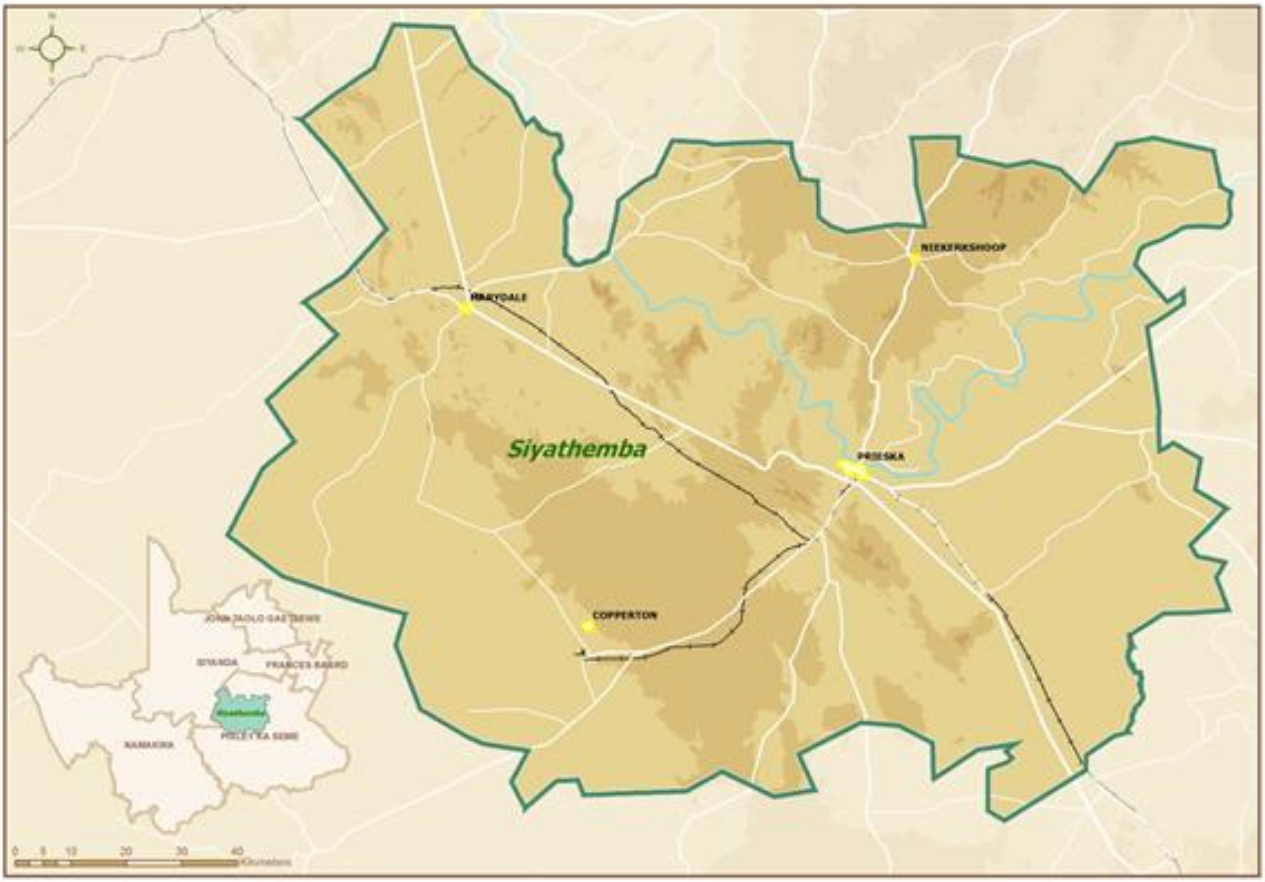
- We commit ourselves to transparent and accountable local governance and the eradication of corruption;
- We endorse a "people-driven" approach and, to this end, commit ourselves to ensuring public participation in local governance;
- We will promote and encourage awareness of gender, youth and disability in the affairs of our Municipality;
- We regard the Members of our Council as our most important asset;
- We will respect the views as inputs of all members of the Council; and
- We are committed to ensuring the implementation of the Municipal Integrated Development Plan

2 DEMOGRAPHIC PROFILE OF THE MUNICPALITY

2.1 LOCALITY OF THE MUNICIPALITY

Siyathemba Municipality is a Category B Municipality (NC077), established in 2001, in accordance with the demarcation process. The Municipality is located within the central eastern parts of the Northern Cape Province on the banks of the Orange River, and falls within the boundaries of the Pixley ka Seme District. The nearest business centre is Kimberley, which is about 220km away.

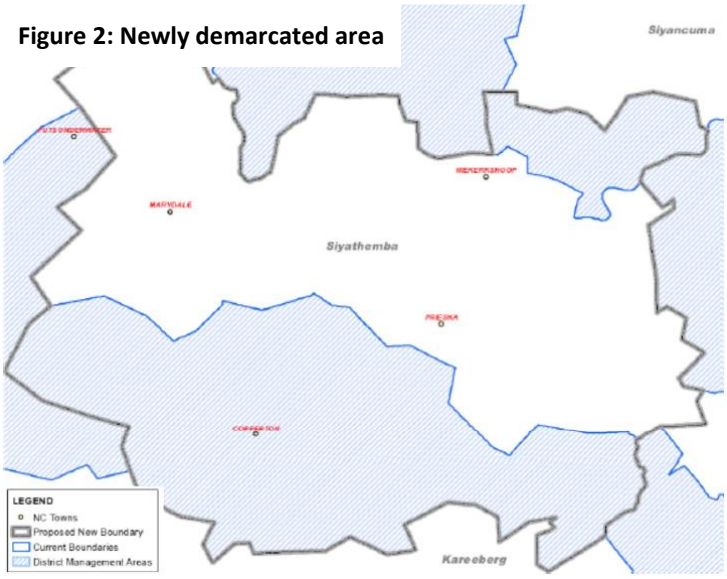
Figure 1: Locality map



Siyathemba Municipality was initially made up of three entities, namely, Prieska, Marydale and Niekerkshoop. After demarcation the area was extended to include not only the towns and surrounding suburbs of Marydale, Niekerkshoop and Prieska but also Copperton.

Copperton is an old mining town that was sold to a private owner after the closing of the Mine. The town is currently on a long term lease by the Request Trust.

Figure 2: Newly demarcated area



Some of the houses were initially demolished and after the lease agreement was signed with the Request Trust, an agreement was reached that the rest of the houses could be retained. An agreement was reached between the Lessee and Alkantpan (Amscor) for the delivery of water, sanitation, and electricity services. Amscor also maintained one of the main roads.

The municipal area encompasses a geographic area of approximately 8,200km^2, which implies that Siyathemba Municipality accounts for 8% of the total district surface area and approximately 3% of the provincial area. The Municipality is divided into 4 Wards.

Table 1: Local Municipality Structure

Ward	Area[2]
Ward 1	Ethembeni in Prieska
Ward 2	Prieska
Ward 3	Section in Prieska including Copperton, farms and Marydale town
Ward 4	Section in Prieska, farms and Niekerkshoop

2 Mr Johann Badenhorst 20th June 2011

2.2 SOCIO-ECONOMIC CONDITIONS OF THE MUNICIPAL AREA

2.2.1 MUNICIPAL POPULATION

The local and regional population is illustrated in the table below. From this Table, it is evident that the Siyathemba Municipality had a local population of just more than 21,000 people during 2010[3].

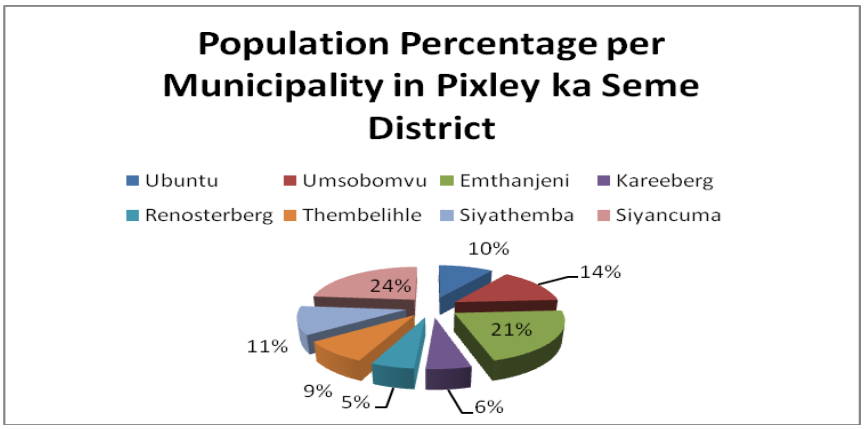
Table 2: Regional Population by Age

		Population		Age Structure					
				Less than 15		15- 64		65 plus	
		2001	2011	2001	2011	2001	2011	2001	2011
DC 07	Pixley ka Seme DM	166547	186351	32.6	31.6	61.5	62.4	5.9	6.1
NC 071	Ubuntu	16375	18601	33.2	33.3	61.1	61.1	5.7	5.6
NC 072	Umsobomvu	23641	28376	33.7	31.4	61	62.8	5.3	5.8
NC 073	Emthanjeni	35785	42356	31.6	31.7	62.4	62.5	6	5.8
NC 074	Kareeberg	9488	11673	32.6	29.4	59	62.5	8.4	8.1
NC 075	Renosterberg	9070	10978	32.9	32.8	60.6	61	6.5	6.2
NC 076	Thembelihle	14467	15701	32.1	30.9	61.9	62.8	5.9	6.4
NC 077	Siyathemba	18445	21591	33.7	30.8	60.4	63.2	5.9	6
NC 078	Siyancuma	39275	37076	32.3	32.2	62.1	62.2	5.6	6

	2004	2006	2008	2010	2011
South Africa	46,745,940	47,827,370	48,911,245	49,991,472	-
Northern Cape	1,088,672	1,089,227	1,093,823	1,103,918	-
Pixley Ka Seme	190,396	185,334	180,082	179,507	186,351
Siyathemba	21,441	21,312	21,239	21,333	21,591

Source: Statistics South Africa 2011

Figure 3: Population Percentage



Source: Statistics South Africa 2011

3 LED Strategy, March 2012

In regional context, this meant that the Siyathemba Municipality contributed 11.9% to the District population (i.e. the second largest Local Municipality in the District by population) and 1.9% to the population of the Northern Cape.

The most dominant population group is Coloured[4]. This group represents 80% of the total population in the municipal area. The other groups are black (12%) and white (8%).

Afrikaans[5]is the most widely spoken language (78%). There are an insignificant number of people which speaks other languages. A total of 824 people indicated that IsiNdebele is their first language and 91 people speak Setswana.

2.2.2 AGE AND GENDER COMPOSITION

The Age & Gender Profile of the local population is illustrated by Figure 1[6]. With regards to this Profile, the following observations were made:

Figure 4: Age and Gender profile

Municipality	Black African		Coloured		Indian or Asian		White		Other	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Ubuntu	2073	1890	6288	6690	51	45	702	708	114	42
Umsobomvu	8532	9222	4161	4512	96	57	780	825	120	66
Emthanjeni	6879	7179	11865	12573	153	81	1653	1734	171	66
Kareeberg	348	210	4830	5106	27	27	510	555	39	18
Renosterberg	1758	1857	3072	3225	36	21	462	480	42	21
Thembelihle	1245	1143	5508	5601	69	12	1101	954	54	15
Siyathemba	2076	1974	7659	7863	66	45	891	936	69	9
Siyancuma	6147	6075	10581	10719	144	105	1395	1383	303	222

- There were slightly more females (51.4%) than males (48.6%) among the local population during 2010. It was, however, noted that the population became slightly less female dominant since 2000, when 52.4% of the population were female.
- The working age group (15 to 64) contributed 64.4% to the local population in 2010. This age group has increased proportionately (from 58.6% to 64.4%) in relation to the other age groups. Since 2000, this group increased by approximately 1,210 people.
- The working age population is slightly male dominant. Since 2000, male working age population increased by around 928 men in absolute terms whiles the number of women increased by about 282.

4 Community Survey 2007; www.statssa.gov.za

5 Community Survey 2007; www.statssa.gov.za

6 LED Strategy, March 2012

- The age dependency ratio declined from 0.7 in 2000 to 0.6 dependents (children & the elderly) in 2010 for every working age adult.
- Since 2000, the proportion of children under the age of 15 declined by 6.7%. This means that the age profile of the local population is becoming older. The number of children in the area also declined from around 14,700 during 2000 to just above 12,000 in 2010.

The population of Siyathemba declined from just over 21,370 people in 2000 to about 21,330 in 2010 (see Figure 2.2). This implies that the population contracted by 0.4% on average per annum. This growth rate is slightly lower in the Pixley ka Seme District Municipality, which contracted 0.7% p.a. The decline of the Siyathemba population was mainly driven by lower fertility rates.

2.2.3 HIV/AIDS PREVALENCE[7]

In the Draft LED Strategy for Siyathemba Municipality, reference is made to the HIV/AIDS prevalence in the area. It is indicated that data from the Actuarial Society of South Africa was used. During 2010, the HIV/AIDS prevalence rate of the Siyathemba population was 6.0% compared to the District rate of 6.5%. These rates compared well to the Northern Cape (7.6%) and South African (12.6%) averages in the same year.

2.2.4 WATER

Table 3 below gives a comparative indication of the status of water provisioning in the district as captured during the 2001 census.

Table 4: Source of Water per Local Municipality

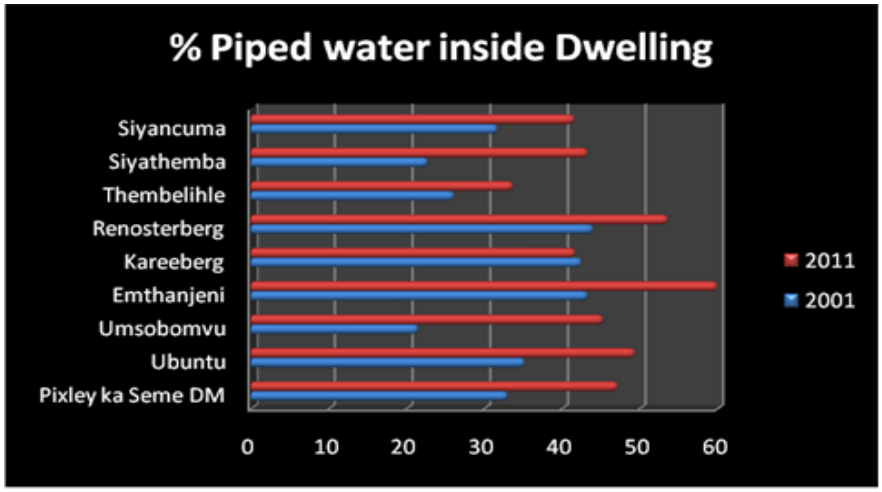
	Regional/local water scheme (operated by municipality or other water services provider)	Borehole	Spring	Rain water tank	Dam/pool /stagnant water	River/ stream	Water vendor	Water tanker	Other	Grand Total
Ubuntu	3477	1215	36	24	210	6	3	117	30	5118
Umsobomvu	6546	831	12	12	147	39	33	153	57	7830
Emthanjeni	9183	1068	15	21	33	3	33	51	36	10443
Kareeberg	2298	774	3	18	24	-	9	81	12	3219
Renosterberg	2394	450	6	3	69	48	-	15	9	2994
Thembelihle	3117	831	3	6	21	114	3	42	3	4140
Siyathemba	4539	762	-	3	66	336	6	75	30	5817
Siyancuma	6348	1677	72	18	135	780	48	408	93	9579
Grand Total	37902	7608	147	105	705	1326	135	942	270	49140

Source: Statistics South Africa 2011

7 LED Strategy, March 2012

Significant progress has been made regarding the provision of water but backlogs still exist. 95% of the households in the district are provided with free basic water (FBW) which is above the provincial average of 87, 7%. Only 3% of households had NO access to piped water 46% had piped water inside dwelling by 2011.Piped Water inside Dwelling is about 47.00%.The table below indicates the provisioning of FBW for all municipalities in the district:

Figure 5: Piped Water inside Dwelling



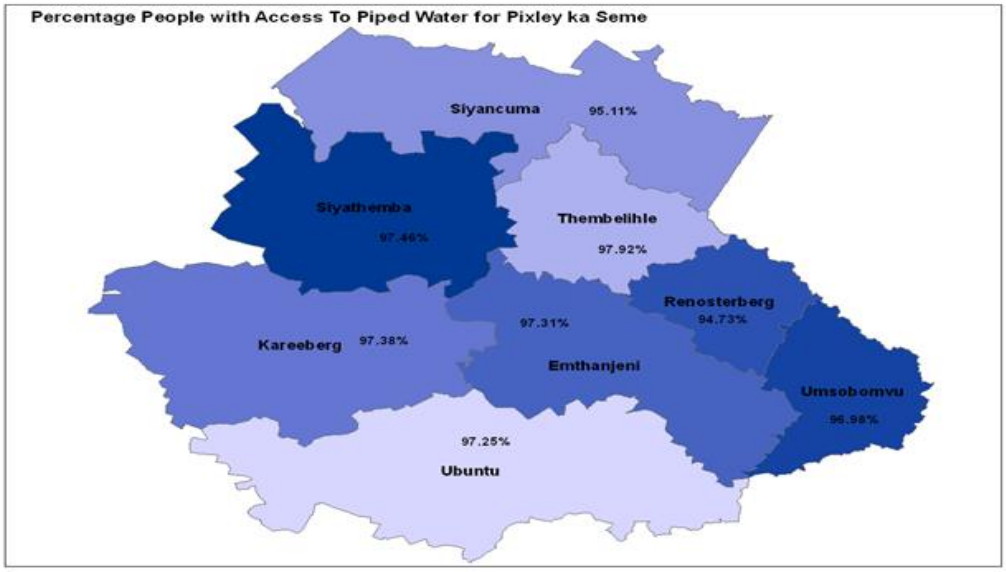
Source: Statistics South Africa 2011 Census

Table 5: Access to water by households

	Piped (tap) water inside dwelling/institution	Piped (tap) water inside yard	Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Piped (tap) water on community stand: distance between 200m and 500m from dwelling/institution	Piped (tap) water on community stand: distance between 500m and 1000m (1km) from dwelling /institution	Piped (tap) water on community stand: distance greater than 1000m (1km) from dwelling/institution	No access to piped (tap) water	Grand Total
Ubuntu	2526	2217	282	36	9	3	48	5121
Umsobomvu	3531	3702	381	108	6	6	93	7827
Emthanjeni	6249	3741	243	108	21	6	78	10446
Kareeberg	1338	1521	225	93	9	3	33	3222
Renosterberg	1599	1233	81	51	6	6	21	2997
Thembelihle	1389	1815	471	291	63	99	15	4143
Siyathemba	2508	2958	264	21	3	3	60	5817
Siyancuma	3957	3354	1227	483	213	18	327	9579
Grand Total	23097	20541	3174	1191	330	144	675	49152

Source: Statistics South Africa 2011

FIGURE 6



Source: Statistics South Africa 2011

Even though many urban residents in the region have access to water and improved sanitation system, some local municipalities are still having water and sanitation backlogs. Siyancuma local municipality has the highest backlog. The table below gives a reflection of the current situation in the region as at March 2011

Table 6: Backlogs March 2011

Municipality	Water	
	Formal	Informal
Emthanjeni	2	0
Ubuntu	0	0
Umsobomvu	2	0
Renosterberg	3	0
Kareeberg	0	0
Siyathemba	31	0
Siyancuma	66	667
Thembelihle	0	0
Total	104	667

2.2.5 SANITATION

Sewerage and sanitation are basic needs of communities which can pose serious health and hygiene risks for communities and the environment at large if not properly managed and monitored. According to the White Paper on Basic Household Sanitation, 2001, basic sanitation is defined as: "The minimum acceptable basic level of sanitation is:

- Appropriate health and hygiene awareness and behaviour
- A system for disposing of human excreta, household waste water ad refuse, which is acceptable and affordable to the users, safe, hygienic and easily accessible and which does not have an unacceptable impact on the environmental and
- A toilet facility for each household"

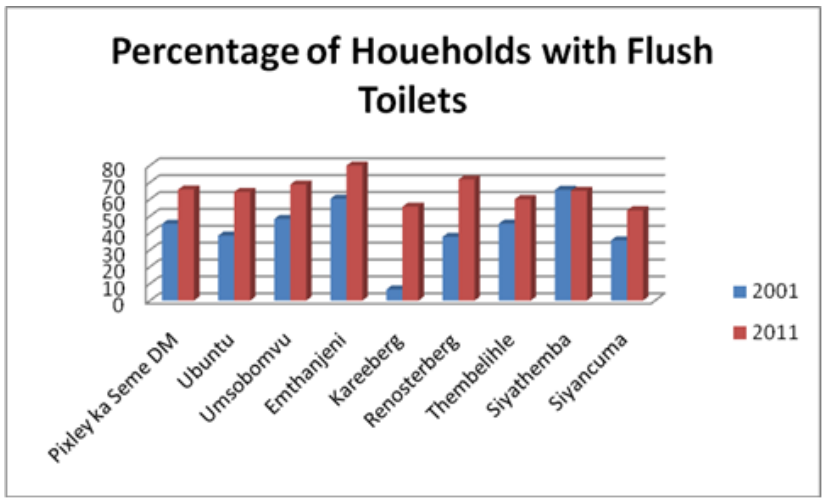
Table 6 below provides an indication of the types as well as those without sanitation in the district:

Table 7: Sanitation per Local Municipality

	Flush toilet (connected to sewerage system)	Flush toilet (with septic tank)	Chemical toilet	Pit toilet with ventilation (VIP)	Pit toilet without ventilation	Bucket toilet
Ubuntu	3300	513	33	180	111	402
Umsobomvu	5388	414	222	852	75	117
Emthanjeni	8319	576	24	336	141	627
Kareeberg	1794	414	6	453	141	96
Renosterberg	2145	342	3	189	51	57
Thembelihle	2484	225	18	456	483	9
Siyathemba	3786	369	6	681	297	213
Siyancuma	5115	651	24	777	618	1152
Total	32331	3504	336	3924	1917	2673

Source: Statistics South Africa 2011

FIGURE 7



Source: Statistics South Africa 2011

The table and the Map above shows that, Pixley Ka Seme has Flush Toilet Connected to Sewerage at 65.70%households, Emthanjeni being the highest with 85.06% and Thembelihle being the east with 64.41%. However it must be mentioned that a project is currently in progress through funds from the Pixley Ka Seme District Municipality to replace buckets with the UDS system. The final 68 toilets have been finalised during this current financial year in Campbell. Full water borne sanitation is currently being constructed in Schmidtsdrift and the sanitation system will be completed with the completion of the house structures.

Table 8: Sanitation Backlogs 2011

Municipality	Sanitation	
	Formal	Informal
Emthanjeni	67	0
Ubuntu	1	0
Umsobomvu	2	205
Renosterberg	32	330
Kareeberg	0	126
Siyathemba	341	129
Siyancuma	2	872
Thembelihle	0	0
Total	445	1662

2.2.6 REFUSE REMOVAL

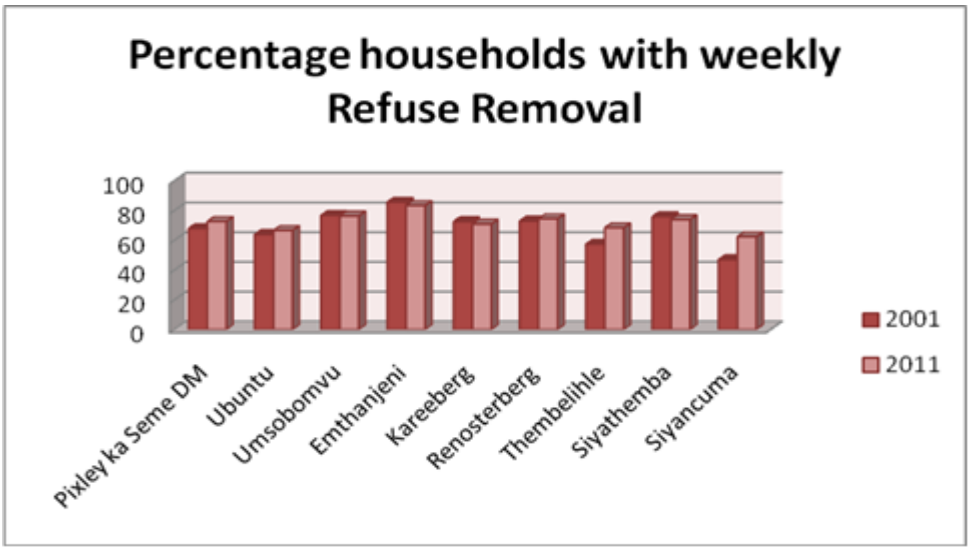
Weekly Refuse Removal in PKSD is about 72.60%.The number of households that are not provided with a refuse removal service in each municipality
is indicated in the table below

Table 9: Refuse removal according to Census 2011

	Removed by local authority/private company at least once a week	Removed by local authority/private company less often	Communal refuse dump	Own refuse dump	No rubbish disposal	Other	Grand Total
Ubuntu	3417	39	108	1191	309	60	5124
Umsobomvu	5982	273	174	1245	132	24	7830
Emthanjeni	8709	216	90	1038	141	249	10443
Kareeberg	2283	15	15	762	111	33	3219
Renosterberg	2226	48	48	582	81	9	2994
Thembelihle	2832	33	189	564	483	39	4140
Siyathemba	4305	60	144	1062	234	15	5820
Siyancuma	5964	111	111	2568	741	84	9579
Grand Total	35718	795	879	9012	2232	513	49149

Source: Statistics South Africa 2011

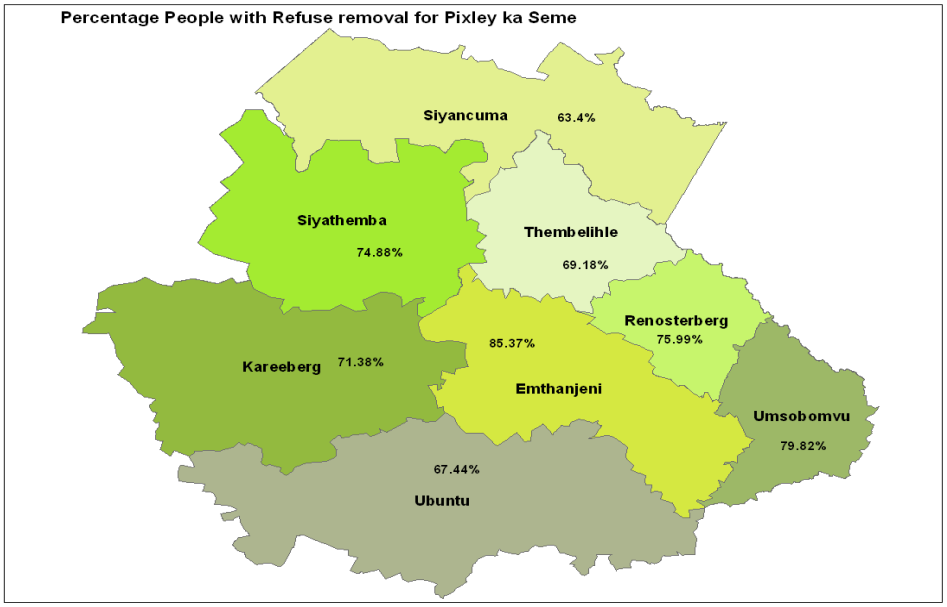
FIGURE 8



Source: Statistics South Africa 2011

On refuse removal, the District has a backlog of 11 279 households. The local municipalities with the most backlogs (households that rely on their own refuse dumps or do no rubbish disposals at all) are Renosterberg, Thembelihle and Kareeberg. In Siyancuma, 3 299 out of 9 506 have refuse removal backlogs (the highest backlogs in all the local municipalities). In Ubuntu, 1 416 out of 4 161 have backlogs and in Thembelihle 1 216 out of 3 592 households have refuse removal backlogs.

FIGURE 9



Source: Statistics South Africa 2011

2.2.7 ELECTICITY

The table below gives a comparative indication of the access to the source of energy in the district as captured during the 2011 censuses.

The proportion of households using electricity for lighting has increased from 57% in 1996 to 84% in 2011. South Africa aims to ensure that by 2030 at least 90% of people have access to grid electricity. Increase in both demand and tariffs may slow down this last effort.

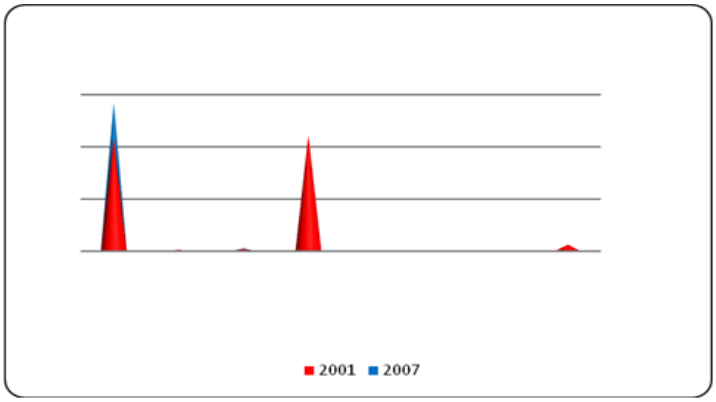
Households using electricity as a source of energy for cooking increased from 47,5% in 1993 to 73,9% in Census 2011.

Table 10: Energy for heating per Local Municipality

	Electricity	Gas	Paraffin	Wood	Coal	Animal dung	Solar
Ubuntu	3180	111	219	1356	81	3	18
Umsobomvu	2709	216	2721	1182	297	12	15
Emthanjeni	6921	258	1026	1131	402	36	42
Kareeberg	1617	141	63	1062	114	3	24
Renosterberg	1998	45	183	531	6	-	9
Thembelihle	1818	120	96	1362	9	-	24
Siyathemba	3057	69	51	2298	18	-	18
Siyancuma	5112	126	57	3480	93	3	21
Total	26412	1086	4416	12402	1020	57	171

Source: Statistics South Africa 2011

Figure 10



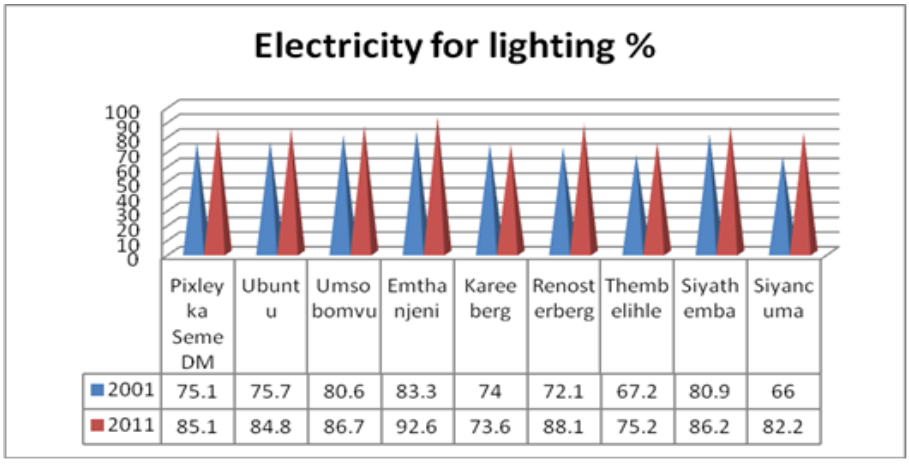
Although relatively expensive, paraffin and gas are used on a limited scale for cooking and heating. Animal dung also features on a limited scale as energy/fuel source for cooking and heating in some rural areas.

Table 11: Energy for lighting per Local Municipality

	Electricity	Gas	Paraffin	Candles (not a valid option)	Solar
Ubuntu	4350	18	33	561	138
Umsobomvu	6801	15	135	855	15
Emthanjeni	9684	18	54	609	63
Kareeberg	2370	9	39	564	231
Renosterberg	2637	6	24	297	24
Thembelihle	3111	9	99	861	45
Siyathemba	5025	9	42	639	102
Siyancuma	7872	6	36	1551	75
Total	41850	90	462	5937	693

Source: Statistics South Africa 2011 Census

Figure 11



The combination of low rainfall, relatively high population densities and the fact that most of the indigenous vegetation in the area is slow growing, have already resulted in over-utilization of this renewable natural resource in certain places. Of major concern in this respect is wood harvesting and usage in the rural areas.

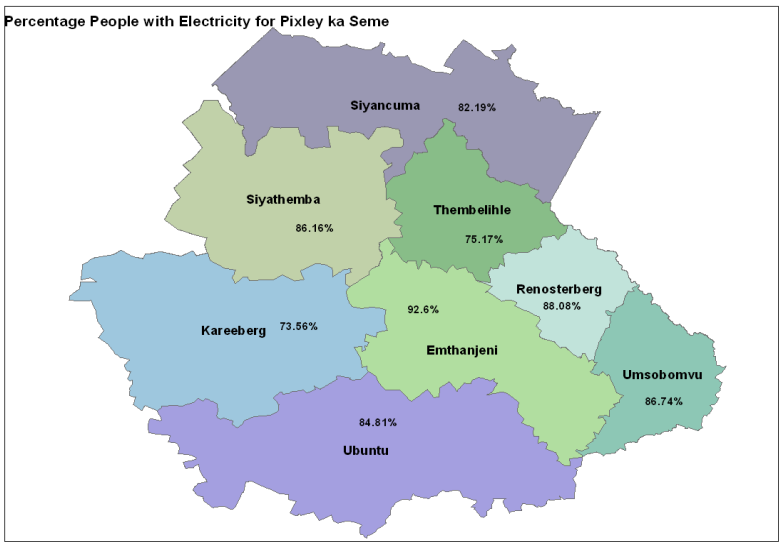
Table 12: Energy for lighting per Local Municipality

	Electricity	Gas	Paraffin	Wood	Coal	Animal dung	Solar
Ubuntu	3927	228	171	744	24	3	18
Umsobomvu	6174	348	828	393	42	21	12
Emthanjeni	9105	420	240	603	27	18	9
Kareeberg	2103	300	63	696	21	-	24
Renosterberg	2469	102	132	261	6	-	9
Thembelihle	2613	684	375	435	3	-	9
Siyathemba	4788	255	51	699	6	3	15
Siyancuma	7182	471	207	1671	15	-	9
Total	38361	2808	2067	5502	144	45	105

Source: Statistics South Africa 2011 Census

There has been an increase in the use of electricity as an energy source and a decrease in the use of paraffin, gas and candles as a source of energy/lighting. Siyancuma, Emthanjeni and Ubuntu have the highest number of backlogs, representing approximately 59,5% of the backlogs in the district.

FIGURE 12



Source: Statistics South Africa 2011 Census

All the Recent information indicates that much of the district households 83% households have access to electricity for lighting and cooking purposes. As much as the existing situation is encouraging, it is however very important to note that some households (17%) are still using candles and paraffin as alternative power sources for meeting their power needs.

2.2.8 HOUSING

All local municipalities are composed of various residential components varying from formal housing units to informal dwelling units as indicated in the table above. Within the District, 82, 8% of households live in formal housing, 10,8% in informal housing and only 2% in traditional houses. Households in the whole PKSD is about 49 193 in respect to the Census 2011, where the average Household Size is about 3.70%, female headed households is about 36.90%, formal dwellings at 86.30% and the housing owned is at 52.00%

Table 13: Enumeration Area type by Local Municipality

	Formal residential	Informal residential	Traditional residential	Farms	Parks and recreation	Collective living quarters	Industrial	Small holdings	Vacant	Commercial
Ubuntu	13926	339	-	3729	-	-	444	-	54	105
Umsobomvu	23361	1890	-	2451	45	264	222	-	96	45
Emthanjeni	39306	-	-	2499	9	3	6	483	39	9
Kareeberg	9450	-	-	2118	-	-	102	-	3	-
Renosterberg	8934	801	-	1173	-	-	-	57	15	-
Thembelihle	13989	-	-	1626	-	12	-	-	75	-
Siyathemba	18555	-	-	2763	-	-	24	162	90	-
Siyancuma	26061	2697	-	7125	-	-	486	594	114	-

Source: Statistics South Africa 2011 Census

2.2.9 TELEPHONES

According to the table below most households in the district, approximately 66.2% do not have telephones at their homes although many of them have expressed need for the service. The existing situation results in many households still depending on public phones and other means of telecommunication. The public telephones according to Telkom authorities are vandalised frequently. The situation calls for a need to protect these facilities as they will be of help to the residents who depend on them.

It is perhaps interesting to note, as the table indicates, that only in Emthanjeni Municipal Area that a substantial number of the households have telephones at their homes and Cell phones.

Table 14: Household access to Telephone

CELL PHONE ACCESS								
	Ubuntu	Umsobomvu	Emthanjeni	Kareeberg	Renosterberg	Thembelihle	Siyathemba	Siyancuma
Yes	3651	5775	8103	2211	2169	2991	4239	7296
No	1479	2064	2352	1011	825	1152	1593	2280
TELEPHONE ACCES								
Yes	708	849	1434	504	453	585	708	1026
No	4422	6993	9024	2718	2541	3555	5124	8550

Source: Statistics South Africa 2011 Census

2.2.10 EDUCATION

Obtaining some form of income generating employment has become increasingly difficult in recent years. This is accentuated by the lack of education with the poorly educated being the ones that experience the highest incidence of poverty.

There has been an 8,3% increase in the number of learners that have accessed education between 1996 and 2001. There has been a 27,1% increase in the number of learners that have matriculated.

Approximately 3% of persons in the Pixley ka Seme district have an educational qualification higher than a matriculation certificate. Of these, approximately one third have a tertiary qualification. The percentage of the population in the formal education system is 66,5% whilst 19,7% of the population received no formal schooling. Table 14 below is a comparison between Census 2001 and 2011 regarding the number of persons between the ages of 5-24 that attend school:

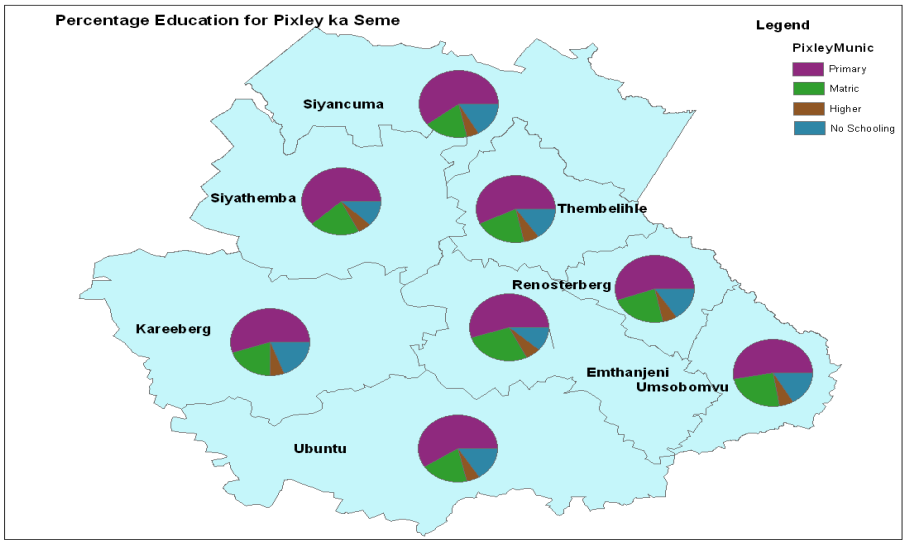
Table 15: Level of Education per Local Municipality

	NC071: Ubuntu	NC072: Umsobomvu	NC073: Emthanjeni	NC074: Kareeberg	NC075: Renosterberg	NC076: Thembelihle	NC077: Siyathemba	NC078: Siyancuma	Grand Total
Grade 12 / Std 10 / Form 5	2100	4050	6396	1314	1506	1926	2433	3861	23586
NTC I / N1/ NIC/ V Level 2	6	18	42	3	6	3	9	18	105
NTC II / N2/ NIC/ V Level 3	6	15	33	6	15	9	12	12	108
NTC III /N3/ NIC/ V Level 4	9	15	54	9	12	9	9	30	147
N4 / NTC 4	6	15	39	9	12	27	18	21	147
N5 /NTC 5	12	12	36	6	6	6	9	36	123
N6 / NTC 6	12	9	51	12	9	21	18	30	162
Certificate with less than Grade 12 / Std 10	3	24	30	6	9	12	6	21	111
Diploma with less than Grade 12 / Std 10	15	24	51	18	15	15	12	24	174
Certificate with Grade 12 / Std 10	66	87	141	36	69	54	84	138	675
Diploma with Grade 12 / Std 10	138	243	381	114	102	90	135	195	1398
Higher Diploma	210	297	363	93	78	153	195	315	1704
Post Higher Diploma Masters; Doctoral Diploma	18	36	30	15	12	27	24	30	192
Bachelors Degree	75	177	261	51	63	114	90	165	996
Bachelors Degree and Post graduate Diploma	42	66	84	18	27	45	27	60	369
Honours degree	30	48	99	15	30	42	48	99	411
Higher Degree Masters / PhD	24	27	69	18	6	18	27	33	222
Grand Total	2772	5163	8160	1743	1977	2571	3156	5088	30630

Source: Stats SA Census 2011

Persons having no schooling did never enjoy formal education, not even some primary education. Implying illiteracy in most cases, these persons are limited to perform manual labour and cannot adequately participate in society.

FIGURE 13



Source: Stats SA 2001 and 2011

Over the last 15 years the rates of no-schooling have been halved across the country. The percentage of persons 20 years and older who have no schooling decreased from 19,1% in 1996 to 8,7% in 2011. This almost halved since 2001 when 19% aged 20+ had no schooling Northern Cape, went from around 22% to around 11%. Whereas in PKS Education (aged 20 +) No Schooling is 14.60%,Higher Education is 6.10% and Matric 20.50% The literacy efforts for adults and the increasing influx of 20 years olds with proper levels of education are expected to drive these proportions further down in the years to come.

FIGURE 14

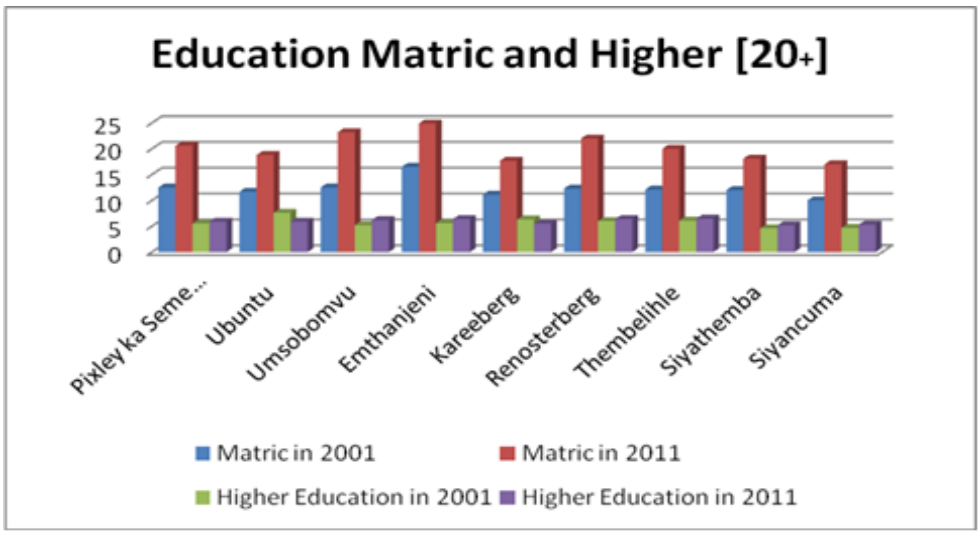
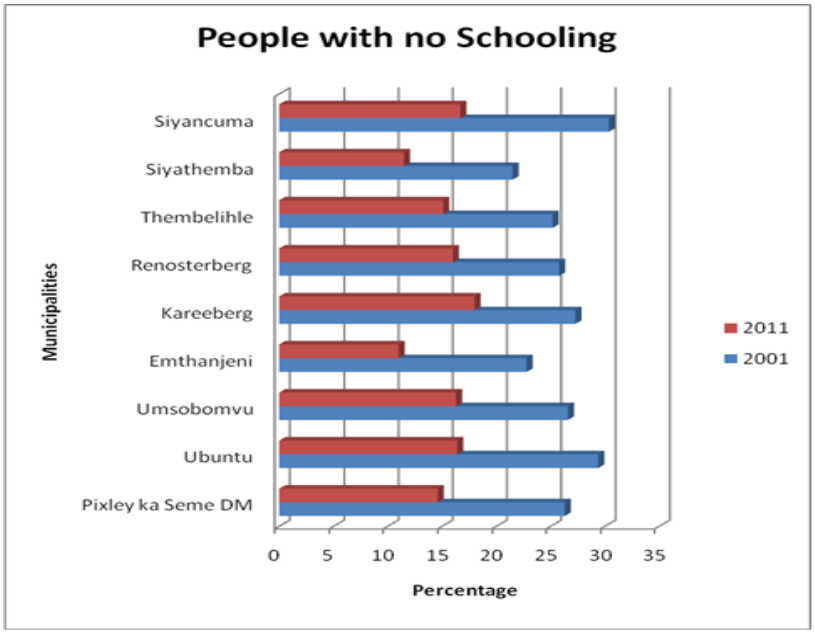


FIGURE 15



Source: Stats SA 2001 and 2011

Table 16: Schooling per Local Municipality

	% NO SCHOOLING	% HIGHER EDUCATION
Ubuntu	10.68	3.72
Umsobomvu	10.68	3.95
Emthanjeni	7.24	3.87
Kareeberg	12.49	3.57
Renosterberg	10.53	3.96
Thembelihle	10.05	3.93
Siyathemba	7.74	3.32
Siyancuma	11.00	3.21

Source: Stats SA Census 2011

The above table presents the level of education of PKS Municipality's labour force; the statistics for the Northern Cape Province and South Africa are included for comparison. The level of primary schooling is overall higher than the primary level of schooling for South Africa. Secondary education completed is overall lower than both the province and national level of education. The tertiary levels of education are the lowest, with just above 3%.

2.2.11 UNEMPLOYMENT AND LABOUR

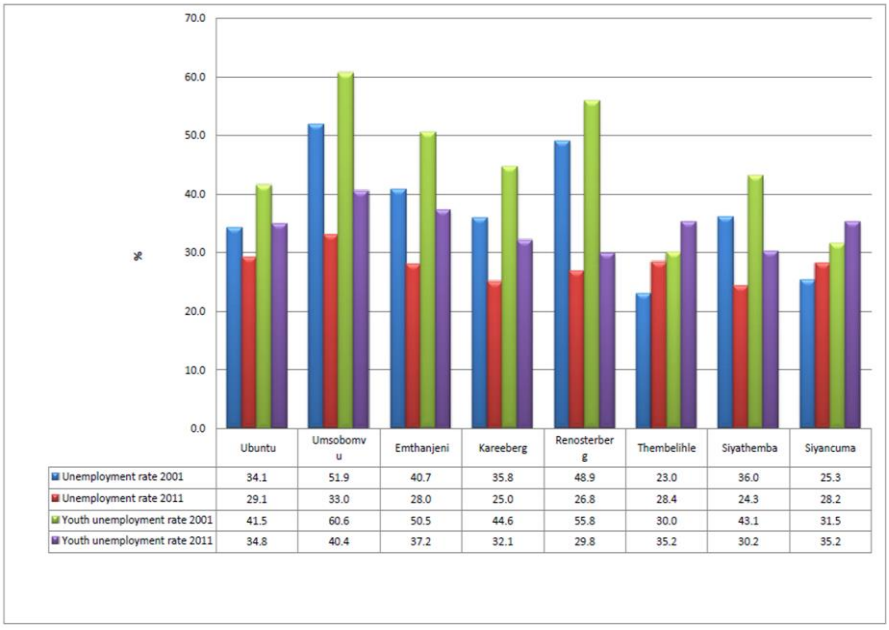
2.2.11.1 UNEMPLOYMENT

There has been a decrease in the number of people employed and a concomitant increase in the number of unemployed in the district between these the 2001 and 2011 censuses. This is directly related to the number of businesses that has closed in the region during the period reflected and indicates the need for a retention or wholesale and retail strategy regarding these businesses. Unemployment reaching approximately 28.3% 2011 and Youth unemployment reaching 35.4% in 2011 as per Stats SA 2011 Census.

Table 17: Employment Status per Local Municipality

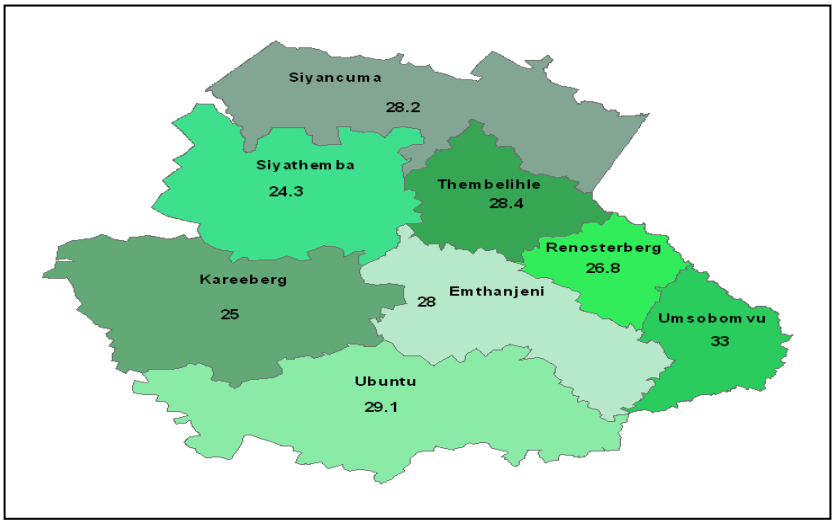
	Employed	Total%	Unemployed	Total%	Discouraged work-seeker	Total%	Other not economically active
Ubuntu	5028	27	2064	11	507	3	3774
Umsobomvu	6117	22	3018	11	1188	4	7491
Emthanjeni	9864	23	3831	9	1203	3	11559
Kareeberg	2856	24	951	8	456	4	3030
Renosterberg	2616	24	957	9	324	3	2796
Thembelihle	3861	25	1533	10	687	4	3777
Siyathemba	5370	25	1728	8	765	4	5787
Siyancuma	7947	21	3120	8	1422	4	10575
Total	43659	192	17202	75	6552	30	48789

FIGURE 16



Source: Statistics South Africa 2011 Census

FIGURE 17



Source: Statistics South Africa 2011 Census

The municipalities that have the largest percentage of unemployed are Umsobomvu and Renosterberg with unemployment rates of 30, 2% and 31, 5% respectively. When the actual numbers of unemployed in the districts are considered, the municipalities that have the most people in the unemployed trap are Emthanjeni, Siyancuma, Umsobomvu and Siyathemba. These account for 20 153 (70, 8%) of the unemployed in the district. Interventions in these municipalities would render the unemployment rate in the district to 7, 2% provided the unemployed 20 153 are employed in these areas.

2.2.11.2 LABOUR

- **LABOUR PARTICIPATION RATE**

The labour participation rate in the district is 50, 43%. This indicates the labour force as a percentage of the population in the age group 15-64 years of age.

- **LABOUR DEPENDENCY RATIO**

The total number of persons supported by every person in the labour force, excluding him or herself is indicated by the labour dependency ratio. In the case of the Pixley ka Seme district this ratio is 1, 81 with working individuals in the Siyathemba, Siyancuma and Thembelihle municipalities having to support approximately 2 persons. The lowest ratio in the district is to be found in the DMA area, at 0, 81.

- **LABOUR YOUTH DEPENDENCY RATIO**

Indicates the total number of youths, aged 0-14, supported by every person in the labour force, excluding him or her. The ratio in the Pixley Ka Seme district is 0, 09. This indicates that working individuals support approximately one youth in the age group 0-14.

- **LABOUR AGED DEPENDENCY RATIO**

The labour aged dependency ratio indicates the total number of aged persons, older than 65, supported by every person in the labour force, excluding him or herself. The ratio for the district is 0, 85.

- **LABOUR ABSORPTION CAPACITY**

The labour absorption capacity is the ability of the formal sector of the economy to absorb the supply of labour in the region. Approximately 25% of the economically active population of the district is unemployed. The municipalities that have the largest percentage of unemployed in the district is Umsobomvu and Renosterberg with unemployment rates of 30% and 31% respectively. The table 18 below indicates the above ratios in each municipality in the district:

Table 18: Labour Ratio

Local Municipality	Labour Participation Rate	Labour dependency ratio	Labour youth dependency ratio	Labour aged dependency ratio
Emthanjeni	49,70	1,81	12,05	84,53
Kareeberg	54,80	1,65	13,91	79,13
Renosterberg	56,94	1,52	18.66	84,97
Siyancuma	45,81	2,09	-1,83	83,53
Siyathemba	48,19	1,99	0,36	83,92
Thembelihle	46,93	1,95	3,10	83,68
Ubuntu	54,39	1,64	13,09	86,03
Umsobomvu	51,94	1,73	8,19	86,81
	5043	**1,81**	**8,80**	**84,65**

Table 19: below indicates the population by municipality living below the minimum living levels in the district.

Local Municipality	Population	Population below MLL	% below MLL
Emthanjeni	35 438	18,418	51.97
Kareeberg	9 356	5,433	58.07
Renosterberg	9 091	5,616	61.77
Siyancuma	35 894	22,559	62.85
Siyathemba	17 497	9,374	53.58
Thembelihle	13,716	3,843	28.02
Ubuntu	16,480	10,787	65.46
Umsobomvu	23,747	20,400	85.91
Total	**164,412**	**98,064**	**59.65**

An average of 60% of the population in the district lives below the minimum living level (MLL). The highest percentage is found in the Umsobomvu municipal area, at 85 %, and the

lowest at 28% in the Thembelihle municipal area. This represents 17,3% of the provincial population living below the MLL. The average monthly (individual) income for the district is approximately R740 which is less than the stipend received as a grant from social services departments.

2.2.12 ECONOMIC CHARACTERISTICS OF DISTRICT

2.2.12.1 REGIONAL GROSS DOMESTIC PRODUCT

The district contribution to the provincial GDPR has consistently been the lowest over recent years with its contribution declining from 10,6% to 9,6% between 2003 and 2004. The economy is predominantly primary sector focused with manufacturing and tourism also contributing to the district economy.

The economic sectors that contribute the most to the GDPR of Pixley ka Seme are Agriculture, Mining, Tourism and Manufacturing.

Table 20 below represents the percentage contribution per economic sector by the district to the gross domestic product of the province for 2003 and 2004.

Table 20: % GDPR of district municipalities per economic sector for 2003 and 2004

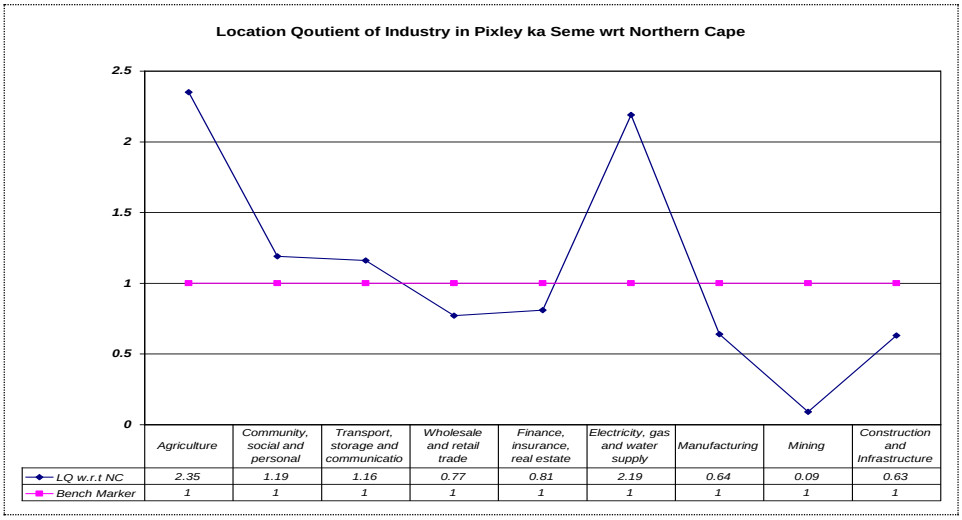
% OF GDPR										
	Primary		Secondary		Tertiary		Taxes - Subsidies		Total GDPR	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Namakwa	4,3	3,8	0,5	0,4	7,3	7,0	0,7	0,8	12,8	**12,1**
PKSDM	3,1	2,7	1,0	0,9	5,8	5,2	0,8	0,8	10,6	**9,6**
Siyanda	3,8	3,3	1,3	1,3	8.0	7,7	1,1	1,2	14,2	**13,5**
Frances Baard	6,8	6,2	3,2	3,1	26,1	28,6	2,5	2,0	38,6	**40,7**
Kgalagadi	16,7	16,5	1,4	1,3	4,9	5,5	0,7	0,8	23,8	**24,1**
NC GDPR	**34,7**	**32,6**	**7,3**	**7,1**	**52,1**	**54,0**	**5,8**	**5,6**	**100,0**	**100,0**

Pixley Ka Seme's total percentage contribution in 2003 was 10,6% and declined to 9,64% in 2004. The district contribution to the GDP has consistently been the lowest over recent years with its contribution declining. It is evident that the tertiary sector contributes the greatest percentage to the GDP of the Northern Cape, followed by the primary sector and then the secondary sector.

The Pixley Ka Seme district displays a similar characteristic as the province with respect to its sectoral contributions to GDPR; the economic sectors that contribute the most to the GDPR of Pixley Ka Seme are Agriculture, Mining, Tourism and Manufacturing, with its secondary sector contribution being the least. The manufacturing sector is part of the secondary sector which indicates that it has declined over the period of 2003 (0, 97%) and in 2004 (0, 92%). To

transform and diversify the status of the districts economy will require a concerted effort to improve and create development opportunities within this sector.

FIGURE 18



	Agriculture	Community, social and personal	Transport, storage and communicatio	Wholesale and retail trade	Finance, insurance, real estate	Electricity, gas and water supply	Manufacturing	Mining	Construction and Infrastructure
LQ w.r.t NC	2.35	1.19	1.16	0.77	0.81	2.19	0.64	0.09	0.63
Bench Marker	1	1	1	1	1	1	1	1	1

2.2.12.2 LOCATION QUOTIENT

A comparative advantage indicates a relatively more competitive production function for a product or service in specific economy than the aggregate economy. This economy therefore renders this service more efficiently. The location quotient is an indication of the comparative advantage of an economy in terms of its production and employment. A location quotient greater than 1 indicates a comparative advantage regarding the sector in one location with respect to another.

The analysis below indicates the location quotient of the Pixley ka Seme District with respect to the Northern Cape Province. The table and graph below indicates the location quotients of sectors in the district municipality with respect to the Northern Cape.

Sectors in the economy of Pixley Ka Seme that have a location quotient larger than 1 are agriculture (2, 35); community, social and personal services (1, 19); transport, storage and communication (1, 16); electricity, gas and water supply (2, 19). These indicate sectors that show potential for additional development in this does not imply that sectors, that do not feature here, should not be pursued since there may be latent potential in these sectors that could be exploited.

Table 21 below indicates the location quotients of the economic sectors in the municipalities

Table 21: Location Quotients of Economic Sectors

	Kareeberg	Emthanjeni	DMA	Renosterberg	Siyancuma	Siyathemba	Thembelihle	Ubuntu	Umsobomvu
Agriculture	1,18	0,31	1,62	0,54	1,11	1,46	1,47	1,59	0,82
Mining	0,08	0,05	0,45	0,00	4,28	0,09	0,02	0,21	0,00
Manufacturing	0,41	0,71	1,28	0,13	1,92	0,76	1,99	0,91	0,18
Electricity, gas and water supply	0,17	0,60	0,36	11,42	0,08	1,14	0,23	0,00	0,97
Construction	0,52	1,25	0,85	0,58	0,99	1,69	0,48	0,55	1,00
Wholesale and retail trade	1,12	1,05	1,20	0,56	1,02	0,94	1,17	0,79	1,13
Transport, storage and communication	0,52	1,76	0,53	0,33	0,84	0,83	1,33	0,75	0,51
Finance, insurance, real estate	1,06	1,79	0,94	0,46	0,78	0,71	0,61	0,72	0,67
Community, social and personal services	1,18	1,37	0,58	0,54	0,82	0,72	0,56	0,85	1,55

Other sectors in the district that have a distinct comparative advantage with respect to the Northern Cape and South Africa are:

- Electricity, Gas and Water supply
- Community, social and personal services
- Transport, storage and communication

The municipalities in the district that have comparative advantages with respect to the sector Electricity, Gas and Water supply are Renosterberg and Siyathemba with location quotients of 11,42 and 1,14 respectively. This resounding comparative advantage in the sector for the Renosterberg municipality is due to the presence of the Van Der Kloof Dam in the municipality. It is the only sector in which Renosterberg has a comparative advantage with respect to other municipalities in the district.

Kareeberg, Emthanjeni and Umsobomvu have location quotients, with respect to other municipalities in the district, of 1, 18, 1, 37 and 1, 55 respectively in the Community, social and personal services sector. In the Transport, storage and communication sector, Emthanjeni and Thembelihle have location quotients of 1, 76 and 1, 33 respectively, indicating a comparative advantage in this sector with respect to other municipalities in the district. The sectors that contribute significantly to the Northern Cape GDPR is highlighted in

the table above with agriculture having the highest LQ, Electricity, gas and water supply second highest LQ etc.

The agricultural sector has the potential for growth with a number of comparative and competitive advantages for the Northern Cape and Pixley Ka Seme in particular.

2.2.12.2 TRESS INDICATORS

The level of diversification or concentration of a region's economy is measured by a tress index. A tress index of zero represents a totally diversified economy whilst the higher the index, the more concentrated or vulnerable the region's economy is to exogenous variables e.g. adverse climatic conditions and commodity price fluctuations.

The economy of the Pixley Ka Seme district has a tress index of 56, 18 indicating a reliance of the Pixley Ka Seme economy on the agriculture, transport and services sector. This tress index indicates that the economy is not diversified but is largely dependent on the agriculture and is vulnerable to exogenous variables such as adverse climatic conditions, commodity price fluctuations. We need to look at ways of diversifying the economy

3 POWERS AND FUNCTIONS OF THE MUNICIPALITY

Government has the responsibility to make Policies and Laws about the rights and responsibilities of citizens and the delivery of Government Services. Government collects revenue (income) from taxes and uses this money to provide services and infrastructure that improves the lives of all the people in the Country, particularly the poor.

3.1 CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, ACT 108 OF 1996

The Constitution of South Africa sets the rules for how Government works. There are three spheres of Government in South Africa namely National Government, Provincial Government and Local Government.

The spheres of Government are autonomous and should not be seen as hierarchical. The Constitution stipulates: "The spheres of government are distinctive, inter-related and inter-dependent." At the same time they all operate according to the Constitution and Laws and Policies made by National Parliament.

Section 152 of the Constitution of the Republic of South Africa, 1996 sets out the objectives of Local Government as follows:

- to provide democratic and accountable government for Local Committees;
- to ensure the provision of services to communities in a sustainable manner;
- to promote social and economic development;
- to encourage the involvement of communities and community organizations in the matters of Local Government.

The responsibilities of Local Government are clearly spelled out within Schedules 4 and 5 of the Constitution.

The sphere of Local Government consists of Municipalities. A Municipality has the right to govern, on its own initiative, the Local Government Affairs of its community, subject to National and Provincial Legislation, as provided for in the Constitution.

The whole of South Africa is divided into Local Municipalities. Each Municipality has a Council where decisions are made and municipal officials and staff who implement the work of the Municipality.

The Council is made up of elected members who approve Policies and By-laws for their area. The Council has to pass a budget for its Municipality each year. They must also decide on Development Plans and service delivery for their Municipal Area.

There are three different kinds of Municipalities in South Africa:

- *Metropolitan Municipalities (Category A):* A Municipality that has exclusive Municipal Executive and Legislative Authority in its area. Metropolitan Municipalities exist in the six biggest cities in South Africa. They have more than 500 000 voters and the Metropolitan Municipality co-ordinates the delivery of services to the whole area.
- *Local Municipalities (Category B):* A Municipality that shares Municipal Executive and Legislative Authority in its area with a Category C Municipality within whose area it falls. Areas that fall outside of the six Metropolitan Municipal Areas are divided into Local Municipalities. There are a total of 231 of these Local Municipalities and each Municipality is broken up into Wards. The residents in each Ward are represented by a Ward Councilor.
- *District Municipalities (Category C):* A Municipality that has Municipal Executive and Legislative Authority in an area that includes more than one Municipality. District Municipalities are made up of a number of Local Municipalities that fall in one district. There are usually between 3 - 6 Local Municipalities that come together in a District Council and there are 47 District Municipalities within South Africa.

A System of further categorisation of Municipalities was introduced by the Municipality Infrastructure Investment Framework (MIIF) to more accurately understand the differentiated challenges facing the Municipalities. This categorisation focused on the size of Municipalities in terms of population, percentage of urban population, service backlogs, future demands and size of municipal budgets. This categorisation is as follows:

A: Metros: Large urban complexes with populations over 1 million and accounting for more than 50% of all municipal expenditure in the Country
B1: Local Municipalities with large budgets and containing secondary cities
B2: Local Municipalities with large town as a core
B3: Local Municipalities with small town, with relatively small population and significant proportion of urban population but with no large town as a core
B4: Local municipalities which are mainly rural with communal tenure and with, at most, or of two small towns in their area
C1: District Municipalities which are not Water Service Authorities
C2: District Municipalities which are Water Service Authorities

Siyathemba Municipality is a Category B Municipality and according to the further categorisation in the MIIF, we are a Category B4 Municipality.

The Constitution stipulates a Municipality has Executive Authority in respect of, and has the right to administer the following activities:

Schedule 4	Schedule 5
▪ Air pollution ▪ Building Regulations ▪ Child care facilities ▪ Electricity and gas reticulation ▪ Fire fighting services ▪ Local tourism ▪ Municipal Aairports ▪ Municipal planning ▪ Municipal health services ▪ Municipal public transport ▪ Municipal public works only in respect of the needs of Municipalities in the discharge of their responsibilities to administer functions specifically assigned to them under this Constitution or any other Law ▪ Pontoons, ferries, jetties, piers and harbours, excluding the regulation of international and national shipping and matters related thereto ▪ Storm water management systems in built-up areas ▪ Trading Rregulations ▪ Water and sanitation services limited to potable water supply systems and domestic waste-water and sewage disposal systems	▪ Beaches and amusement facilities ▪ Billboards and the display of advertisements in public places ▪ Cemeteries, funeral parlours and crematoria ▪ Cleansing ▪ Control of public nuisances ▪ Control of undertakings that sell liquor to the public ▪ Facilities for the accommodation, care and burial of animals ▪ Fencing and fences ▪ Licensing of dogs ▪ Licensing and control of undertakings that sell food to the public ▪ Local amenities ▪ Local sport facilities ▪ Markets ▪ Municipal abattoirs ▪ Municipal parks and recreation ▪ Municipal roads ▪ Noise pollution ▪ Pounds ▪ Public places ▪ Refuse removal, refuse dumps and solid waste disposal ▪ Street trading ▪ Street lighting ▪ Traffic and parking

3.2 WHITE PAPER ON LOCAL GOVERNMENT, MARCH 1998

The fact that Municipalities have the Constitutional duty to provide services does not mean that the delivery of services is easy and without problems. In order to facilitate the task of Municipalities, certain "Principles for Service Delivery" are contained in the White Paper on Local Government, 1998. These Principles that have been set to facilitate the delivery options of Municipalities, can be summarized as follows:

- Accessibility of services
  At least a minimum level of services must be made available to all persons residing within the municipal area and imbalances in access to services must be addressed through Development Programmes.

- Affordability of services
  Municipalities should ensure affordability of services through:

- setting tariffs, which balance the economic viability of service provision with the ability of the poor to access services;
- determining the appropriate service levels - neither too high nor too low;
- cross subsidization within and between services.

- Quality of products and services
  Quality of services relates to matters such as sustainability for purpose, timeliness, convenience, safety, continuity and responsiveness to service-users.

- Accountability for services
  The Municipality remains accountable for ensuring the provision of quality services, notwithstanding the service delivery mechanism chosen.

- Integrated development and services
  The planning and provision of service delivery should be integrated with Municipal Policy Objectives, such as poverty eradication, special integration and job creation through public works.

- Sustainability of services
  The sustainability of services depends on financial and organizational systems, which support financial viability, as well as environmentally sound and social just use of resources.

- Value for money
  The best possible use of public resources must be made to ensure access to affordable and sustainable services.

- Ensuring and promoting competitiveness of local commerce and industry
  The subsidization of domestic users by levying higher rates and service charges on business, industry and commerce must not lead to adversely affecting industry and commerce as this may cause these businesses to move elsewhere.

- Promoting democracy
  Municipalities must promote the democratic values and principles enshrined in the Constitution.

This Act further introduced the notion of developmental Local Government. Developmental Local Government is defined as Local Government that is committed to working with citizens and groups within the community to find sustainable ways to meet their social, economic and material needs and improve the quality of their lives

Considering the Constitutional mandate, as well as the provisions of the White Paper, it can be summarised that the main function of Local Government is to provide foods and services that meets the social, economic and material needs of the people. Principles that underpin the manner, in which these goods and services are provided, should be democracy, accountability, sustainability and public participation.

3.3 LOCAL GOVERNMENT MUNICIPAL SYSTEMS ACT (ACT NO. 32 OF 2000)

In order to play the critical role, Municipalities are mandated to undertake a process of Integrated Development Planning. The main objective of Integrated Development Planning is to forge greater and better coordination and integration of development initiatives by the various Development Agencies with each local space.

The principle Legislation which relates to the development of IDPs, is the Municipal Systems Act. Section 25 of the Act Supra mandates each Municipal Council to adopt a single, inclusive and Strategic Plan for the development of the Municipality. As a Strategic Plan of the Municipality, the IDP should therefore provide a clear road map for the Municipality that would take it from current situation to its desired state in five years. To this effect, the IDP must:

- Link, integrate and coordinate Plans and take into account, Proposals for the development of the Municipality
- Align the resources and capacity of the Municipality with the implementation of the Plan
- Form the Policy Framework and general basis on which Annual Budgets must be based
- Be compatible with National and Provincial Development Plans and planning requirements that are binding on the Municipality in terms of Legislation.

The Act further focuses on the internal systems and administration of a Municipality including:

- Public accountability and involvement
- Guidelines for making Bylaws
- Preparation of Integrated Development Plans (IDPs)
- Establishing of Performance Management Systems
- Introducing the differentiation between the Authority (WSA) and Provider (WSP) functions of a Municipality and ensuring its consistency with the Water Services Act
- Identifying the importance of alternative mechanisms for providing municipal services, and prescribing the requirements for entering into partnerships with others. In this instance, this would apply to a WSA contracting a WSP to fulfill the provider function.

3.4 MUNICIPAL STRUCTURES ACT (ACT NO. 117 OF 1998)

The Municipal Structures Act provides for the establishment of Municipalities in accordance with the requirements relating to Categories and Types of Municipalities. It sets out the criteria for determining the category of each Municipality Type, as well as defining the type of Municipality that may be established within each category, and the manner in which each of the municipal structures is to function and conduct itself. The Municipal Structures Act was amended by the Municipal Structures Amendment Act, 2000 (Act No. 33 of 2000). The primary purpose of the Municipal Structures Act, and the Structures Amendment Act, is:

- To provide for the establishment of Municipalities in accordance with the requirements relating to categories and types of Municipalities;
- To establish criteria for determining the category of Municipality to be established in an area;
- To define the types of Municipalities that may be established within each category;
- To provide for an appropriate division of functions and powers between categories of Municipalities;
- To regulate the internal systems, structures and office-bearers of Municipalities; and
- To provide for appropriate electoral systems.

3.5 MUNICIPAL FINANCE MANAGEMENT ACT (ACT NO. 56 OF 2003)

This Act applies to all Municipalities and Municipal Entities. The object of the Act is to secure sound and sustainable management of the fiscal and financial affairs of Municipalities by establishing norms and standards for:

- Ensuring transparency, accountability and appropriate lines of responsibility in the fiscal and financial affairs of Municipalities and Municipal Entities;
- The management of their revenues, expenditures, assets and liabilities and the handling of their financial resources;
- Budgetary and financial planning processes and the co-ordination of those processes with the processes of organs of state in other spheres of Government;
- Borrowing;
- The handling of financial problems in Municipalities;
- Supply chain management; and
- Other financial matters

A large part of the Municipal Finance Management Act deals with the requirements for a consistent and transparent Supply Chain Policy by Municipalities.

4 PROCESS FOLLOWED TO DEVELOP THE IDP

Integrated development planning is a process through which Municipalities prepare a Strategic Development Plan for a period of five years. The IDP is a product of the integrated development process. It is the principal strategic planning instrument, which guides and informs all planning, budgeting, management and decision-making in a Municipality. All Municipalities must, in terms of the Municipal Systems Act of 2000, undertake an integrated development planning process, thus the IDP is a legislative requirement and has a legal status and it supersedes all other Plans that guide development at Local Government level.

In the past, Municipalities followed a specific methodology to develop/compile the IDP. The phases in this process were:

1. Pre-planning Phase
2. Establishment of Structures
3. Compilation Phase
    a. Analysis Phase
    b. Strategies
    c. Projects
    d. Integration
4. Approval

The 2009 State of the Local Government Report noted that a number of Municipalities were under distress. These Municipalities primarily had difficulties delivering expected services to communities. The Report recommended that urgent and focused interventions had to be provided to enable Municipalities to deliver services effectively and efficiently. One of the critical processes which will assist Municipalities in service delivery is the development of credible IDPs.

The Department of Co-operative Governance, Human Settlements and Traditional Affairs therefore embarked on a process to simplify the current IDP process. The development and implementation of this simplified Framework does not mean a compromise on the quality of the Plan or the provision of inferior series. Instead, it refers to the development of a Planning Framework that is simplified in a way that makes it easy for smaller Municipalities to develop implementable, demand responsive plans that address sustainable development.

Siyathemba Municipality was therefore invited by the Department of Co-operative Governance, Human Settlements and Traditional Affairs to form part of the “Simplified IDP Framework” – Process. The Municipality attended the work session on the 19th of March 2012 during which the process was explained.

Siyathemba Municipality aims to comply with this Process during 2012 and therefore to have an IDP for 2012 on the new format. The methodology we followed is indicated in the figure below.

Table 3: Process

	Activity	Sub Activity	Target Dates
1	IDP 2014	IDP 2013 is used as the basis document for the 2014 IDP. The comments received from the various Sector Departments were used to improve the 2012 IDP.	May 2014
2	Project Wish List	The Municipality requested all the various Communities/Institutions in the area to submit projects which they want to see in the IDP.	November 2013
3	Compilation of Draft Document	The information available in the 2013 IDP Document was used to populate the new 'Simplified Format". Information from 2013 is updated with the latest available data. Comments from the various divisions in the municipality were worked into the 2014 Document.	1st Draft submitted to Council on 31 March 2014. 2nd Draft ready for Public Participation 00 April 2014. Final Draft ready for public comments (21 days) 30 April 2014.
4	Public Participation	2nd Draft IDP were taken back to the communities. Community Meetings are held in the 3 towns. Final Draft IDP is available at the Municipality for 21 day for comments.	00 April 2014 30 April 2014
5	Finalisation of Document	All the comments received from the public participation process will be worked into the document. All the comments received from the Sector Departments will be worked into the final document	IDP submitted to Council for approval 30 May 2014. IDP Engagement session took place 30 May 2014.

5 STATUS QUO ASSESSMENT

In the paragraphs below, the current state of affairs within the Municipality with relation to the key performance indicators, are discussed. In each of the sections, status quo information is provided.

The following aspects should be taken note of:

- Information used in the IDP is sourced from various other Plans and Strategies previously developed by the Municipality. Reference will be made to the source used and will be indicated as a footnote for that specific section. For example, statistics with regards to water and sanitation delivery is based on the Geo-Database information from the Department of Water Affairs, Local Economic Development information is sourced from the Draft LED Strategy for the Municipality.
- The Municipality does have a generic Spatial Development Framework (SDF) developed by the District Municipality during 2006. The SDF for Siyathemba indicated potential areas where development is most likely to occur. It did however not stipulate the level of services. In all the sub categories of Point 6.1 Service Delivery and Infrastructure Development, the Municipality will state their vision with regards to the level of service. The generic SDF is attached.
- The Municipality does not have a Migration Plan in place. The population figures in Siyathemba Municipality is however relatively consistent over the past years.

5.1 SERVICE DELIVERY AND INFRASTRUCTURE DEVELOPMENT

Strategic Objective	Eradicate backlogs in order to improve access to services and ensure proper operations and maintenance
Intended Outcome	Sustainable delivery of improved services to all households

5.1.1 WATER

All households to have access to at least clean piped water 200 from household.

Siyathemba Municipality is the Water Services Authority (WSA) and Water Services Provider (WSP) for the 3 towns within their area of jurisdiction. The Municipality strives to fulfil all the WSA and WSP functions, as stipulated in National Legislation.

As WSA, the Municipality needs to ensure access to services, develop a WSDP, compile Policies and Bylaws and put in place institutional arrangements for the delivery of services. As WSP, the Municipality needs to ensure that services are rendered in an effective, efficient and sustainable manner according to the Legislative and Planning Documents developed by the WSA. Operation and maintenance, asset management and customer care are therefore important.

In the paragraphs below, the most critical aspects with regards to water service delivery will be discussed.
Water services are rendered in Prieska, Niekerkshoop and Marydale. The Municipality is also supplying bulk water to Copperton, but Alkantpan (Armscor) is responsible for the delivery of water, sanitation, and electricity services. No services are currently being rendered on farms.

The Spatial Development Framework of the Municipality does not indicate an approved level of water services. The Municipality however strives to have a basic level of service on erven, before people move into that specific area. House connections are therefore the level of service the Municipality strives to provide. In informal areas, standpipes are provided as an interim level of service.

The Municipality understands, as Water Service Authority, that a proper planning document should be in place to coordinate all water services initiatives. Siyathemba Municipality therefore supports the initiative from the Department of Water Affairs to compile Water Services Development Plans (WSDP). DWA National made a new WSDP Guideline available in January 2010. Since then, the new WSDP Guideline has been revised several times to improve the content of the WSDP. Currently, the new WSDP Guideline consists of the following WSDP documentation:

Table 4: WSDP Status

WSDP components	Outcome
WSDP Module 1 (Knowledge)	Module 1 indicates all related enabling factors per water services topic listed in a tabular format to present an overall status quo of information on a WSA level. The objective of Module 1 is to identify gaps and shortcomings
WSDP Module 2 (Information)	This module will provide detail information regarding the different topics, as well as house all information regarding certain aspects with a topic. The objective of Module 2 is to obtain detail information to address gaps identified in Module 1 and to incorporate them into Module 2.
WSDP Module 3 (Strategies)	Module 3 relates to Strategic Plans. The objective of Module 3 is to develop Strategies identified as gaps in Module 1 and incorporate them into Module 3.
IDP Input Report	This Report will be an outflow from the existing WSDP Module 1 disseminating the required information in a standardized report to the IDP process for incorporation during development stages. The objective of this Report is to assist Local Government and WSAs with inputs regarding the IDP Development and IDP Evaluation Process.
Annual Business Plan	This report will be an outflow from the existing WSDP Module 1. According to the Act of 1997, Section 12, each WSA should annually compile a Business Plan which describes actions dealt with in terms of water and sanitation services. The objective of the task is to assist Local Government and WSAs with inputs regarding the compilation of a WS Business Plan.

Siyathemba Municipality completed WSDP Module 1, 2, 3, the IDP Input Report and Annual Business Plan.

5.1.1.1 Water Provision: Catchment to Consumer

Prieska is abstracting water from the Orange River whilst Marydale and Niekerkshoop are dependent on groundwater. Copperton receives its water from the Orange River via Prieska.

In the paragraphs below, a short description of the current water infrastructure is provided.

a. Prieska

The total volume of potable water for Prieska is supplied from the Flippie Holtzhauzen Water Treatment Plant that extracts all its raw water from the Orange River. Electrically driven pumps (4) which can deliver up to 200ℓ/s to a purification plant, are used. The purification plant has a capacity of 6 Mℓ/day and potable water is stored in two potable water reservoirs. Water is pumped by two pumps (that operate alternately) from the water treatment plant via a 150mm, a 200mm and a 300mm pipeline to three nearby distribution reservoirs, as can be seen on Figure 19. Two of the reservoirs have a volume of 2.27 Mℓ and the third, 0.34 Mℓ. These reservoirs are hereafter referred to as the Koppie Reservoirs. The 300mm pipeline is a dedicated line from the pumps at the water treatment plant to the reservoirs. The 200mm pipeline has a connection to a 300mm line that supplies the other reservoirs in the system from the Koppie Reservoirs. The 150mm pipeline connects the water treatment plant to the smaller 0.34 Mℓ capacity reservoir. This reservoir is located next to, but slightly lower than the two larger reservoirs. The 150mm pipeline has many direct connections with the distribution system and is not a dedicated supply to the reservoir. There is a bulk water meter at the water treatment plant that measures all the fresh water pumped from the water treatment plant. The water treatment works is in a good condition and not used at its full capacity.

b. Marydale

In Marydale, water supply is obtained from 6 production boreholes. The rated capacity of the boreholes is 8.9 ℓ/s. The safe yield of the 6 boreholes per year is 276,820.80m^3 Submersible pumps withdraw the water from 6 production boreholes and pump the water to two high lying water distribution reservoirs. The reservoirs store water for use during periods of peak demand and provide the pressure needed to reticulate water to the town.

There is no water treatment works facility in Marydale. Water is disinfected in the two reservoirs by adding floating chlorinators.

c. Niekerkshoop

Water delivery to the community for human consumption at Niekerkshoop consists of ground water from five boreholes namely GWK1, GWK2, Municipal Offices, G42098 and GWK 3. The water is abstracted with supply lines to the existing two reservoirs

with a combined capacity of 0.4 Mℓ. From these reservoirs water is distributed to the water reticulation system to the consumers of Niekerkshoop. There is no water treatment works facility in Niekerkshoop. Water is disinfected in the two reservoirs by adding floating chlorinators.

d. Copperton

A 450 mm diameter concrete lined steel pipeline, together with a dedicated water treatment works, was constructed by the Copperton Mine in 1970's for supplying water from Prieska to the Mine. The total pipeline length from the water treatment works at Prieska to Copperton is approximately 52 km. After the Mine was closed down in about 1988, the ownership of the pipeline was transferred to Alkantpan, who is using the pipeline to supply water to their testing facilities close to Copperton. Alkantpan is the Owner of the pipeline and also operates and maintains the pipeline.

The water demand on the pipeline in 2008 was estimated at 0.45Ml/day, and includes the provision to Althantpan, Copperton and some of the farms on the pipeline route. Water meters are connected at each demand point and the water is measured on a monthly basis.

The total length of the pipeline is approximately 52 km and the first approximately 40 km of the pipeline is a pumping main, from Prieska Water Treatment Works to a set of reservoirs from where it gravitates for approximately 12 km to the Mine in Copperton.

Since the transfer of the pipeline in 1990, there were no pipe bursts or leaks detected on the pipeline. Altkantpan has two staff members responsible for the operations and maintenance of the pipeline.

According to the Kareeberg Bulk Water Supply Implementation Readiness Report, no evidence was found that could indicate that the pipeline is in a poor condition. However, limited maintenance has been done on the pipeline since it was transferred to Altkantpan. The lack of maintenance on air valves, especially a pumping main where pumps are switched on and off regularly, could increase the possibility of cavitation due to insufficient air release points, which may result in damage to the internal lining.

There is a group of steel reservoirs at the end of the pumping main, approximately 40 km from the Prieska WTW. The total capacity is 10,9ML. The reservoir near Copperton has a capacity of 2 Ml. The set of reservoirs at the end of the pumping main consist of five reservoirs, two of which are 4 ML each and three of which are 0.5 ML each. According to the Kareeberg Bulk Water Supply Report, little maintenance was done on all the reservoirs and the operational valves. No leaks were detected on the group of five reservoirs that are situated at the end of the pumping main, which are currently in use. No corrosion was spotted.

A recommendation was made in the above mentioned Report that a CCTV camera investigation should be conducted to determine the condition of the pipeline.

5.1.1.2 Level of Service

The Municipality progressed very well in reaching the National Target to eradicate water needs in their area of jurisdiction. The DWA Geo-database reflects that most of the backlogs have been addressed.

Table 5: Water Level of Services: Formal

Settlement	Households 2011	House connection	Erf Connection	Communal Standpipe	Communal Standpipe>200m	None	TOTAL WATER FORMAL STANDS
Marydale	785	202	449	0	0	0	651
Niekerkshoop	493	156	294	0	0	40	450
Prieska	3,089	2,650	10	365	0	0	3,025
TOTAL	4,367	3,008	753	365	0	40	4,126

Table 6: Water Level of Services: Informal

Settlement	Households 2011	House connection	Erf Connection	Communal Standpipe	Communal Standpipe>200m	None	TOTAL WATER INFORMAL HH
Marydale	785	0	0	129	0	0	129
Niekerkshoop	493	0	0	0	0	0	0
Prieska	3,089	0	0	0	0	0	0
TOTAL	4,367	0	0	129	0	0	129

The Municipality confirmed that bulk water infrastructure is already available for the 40 households in Niekerkshoop. House connections will be made by technical staff of the Municipality.

5.1.1.3 Water quality

The Municipality participated in the Blue Drop Certification Programme from the Department of Water Affairs.

The Municipalities scored an overall average of 40.95% during the 2011 Assessment. The following scores were obtained in each of the water supply systems:

- Prieska: 37.52%
- Marydale: 50.85%
- Niekerkshoop: 56.56%

The Blue Drop Certification Programme is measuring the entire Water Quality Management of a Municipality. The Municipality still needs to improve on specific criteria such as Criteria 1 (Water Safety Planning), Criteria 2 (Process Control and O&M) and Criteria 8 (Asset Management).

The water quality provided to the people of Siyathemba over the past 12 months (February 2011-February 2012) can be summarised as follows:

Table 7: Compliance Summaries

Supply System	Microbiological	Chemical	Physical	Operational
Marydale Borehole system	83.80%	86.50%	>99.9%	67.60%
Niekerkshoop Borehole System	88.50%	>99.9%	99.60%	77.60%
Prieska Orange River	98.50%	>99.9%	>99.9%	94.30%
TOTAL	91.60%	97.30%	99.90%	82.20%

The SANS241 requires 97% and 85% compliance for respectively Micro and Chemical. The Municipality must therefore improve on the microbiological compliance. These problems are mainly experienced in the borehole systems of Marydale and Niekerkshoop.

The Municipality has requested funds from DWA to assist in closing the gaps in drinking water quality management. An allocation was made to the Municipality and the Municipality started to develop the Water Safety Plan for the 3 Water Supply Systems. As part of the Water Safety Plan a management approved implementation plan is developed. The Municipality identified the execution of this plan as a priority.

5.1.1.4 Operation and Maintenance

The Municipality does not have an Operation and Maintenance Master plan available for any of their water infrastructure. This activity is listed as a possible project for future years.

The Municipality is however doing regular maintenance on their entire infrastructure.

5.1.1.5 Associated Facilities

There are 9 Schools and 6 Health Facilities in the Municipal Area. All facilities are serviced with water and sanitation services. The Municipality has enough resources in place to properly bill for the services it is providing.

5.1.1.6 Free Basic Services

Siyathemba Municipality is providing 6kℓ of free basic water to all the indigent households. An Indigent Policy is available which provides the detail with regards to who qualify as an indigent. The Register is updated on an annual basis.

During the 2010/11 financial year, 49% of the households were registered as indigents.

5.1.1.7 Related Projects

- The bulk water supply to Prieska is sustainable. It is envisaged that bulk water supply to Marydale and Niekerkshoop could become a problem within the next 15 - 18 years. Bulk Water Supply Studies are therefore conducted for Niekerkshoop.
- The Municipality is in the process to upgrade the Water Supply Network from the Boreholes to the 2 Reservoirs in Marydale. One of the Reservoir's capacities will also be increased.

5.1.1.8 Challenges

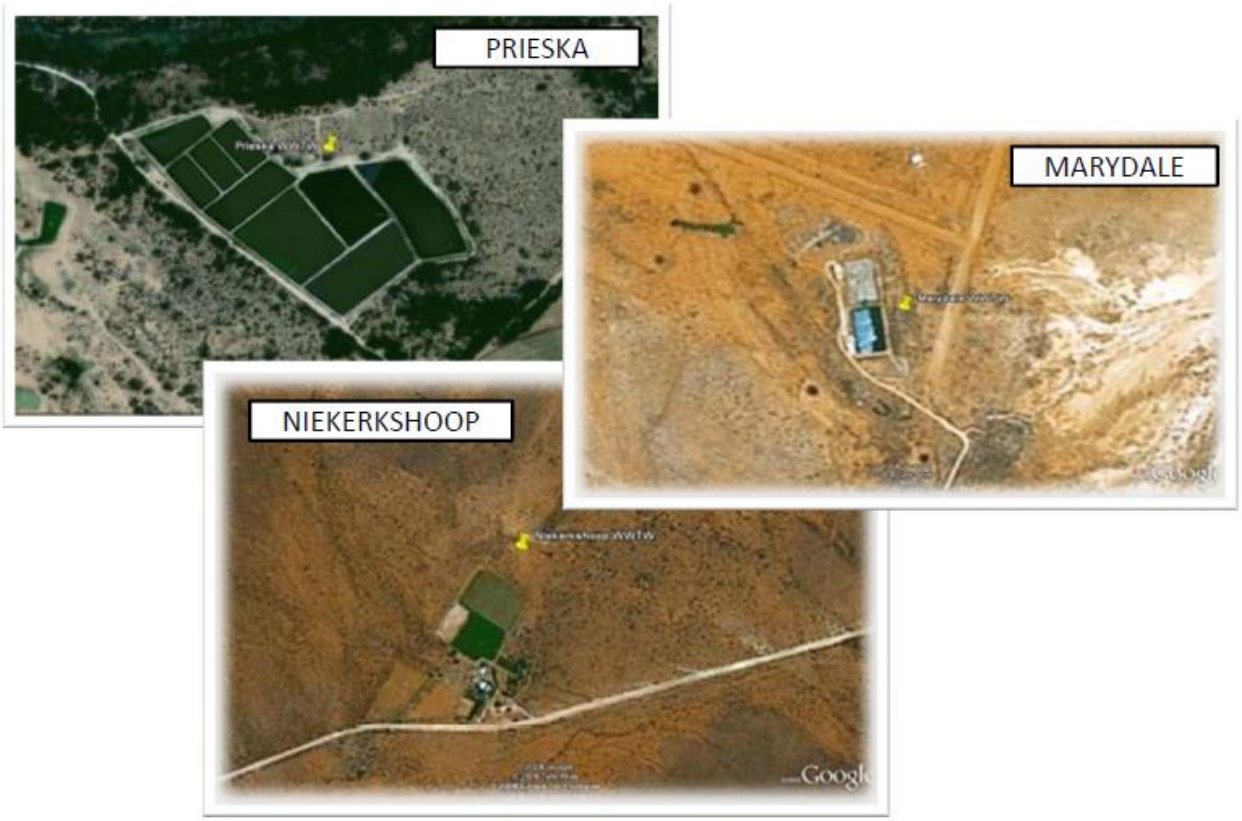
The following key challenges can be identified.

1. Studies indicated that the bulk water supply to Niekerkshoop and Marydale may become a problem in the next few years.
5. Although the municipality progressed very well with regards to the eradication of water needs in their area of jurisdiction, there is still some areas where services needed to be upgraded to a minimum RDP level.
6. No as-build drawings for the internal water reticulation network in Marydale is available.
7. The municipality are doing maintenance of infrastructure on an adhoc basis.
8. Currently the Municipality are not providing any services on farm areas.
9. The Blue drop score for the municipality is still very low.

5.1.2 SANITATION

Sanitation services are rendered in Prieska, Niekerkshoop and Marydale. No services are rendered to Copperton, since Alkantpan (Amscor) is responsible for the delivery of water, sanitation, and electricity services. No services are currently being rendered on farms.

5.1.2.1 Wastewater and Collection Infrastructure



The Sanitation Systems in the 3 towns can be summarised as follows:

Table 8: Wastewater Supply Technology

	Prieska[8]	Niekerkshoop[9]	Marydale[10]
Wastewater treatment works	Anaerobic digesters / Oxidation ponds	Oxidation ponds	Oxidation ponds
Design capacity	3Mℓ	3Mℓ	6.5Mℓ
Operate within design capacity	Yes	Yes	Yes
Collection services	1 pump station and approx. 57.3 km pipework	No pump stations and approx. pipework	No pump stations and approx. km pipework.

MARYDALE[11]

The Sanitation System in the Marydale community consists of VIP toilets and some flush toilets with a conservancy tank. The septic tanks are serviced by the Local Municipality staff on a daily basis. The WWTW/Oxidation Pond System in Marydale is utilised for the sewer effluent from the conservancy tanks transported by tankers to the Works. The WWTW is in a process of being upgraded and the Council has submitted Business Plans to the relevant MIG Offices for possible funding of the project. No return flows from the oxidation ponds are available. The tanker loads dumped per day are captured in the Registers to determine the inflow volume.

NIEKERKSHOOP[12]

The Sanitation System in the Niekerkshoop community consists of VIP and UDS toilets and some flush toilets with a conservancy tank. The septic tanks are serviced by the Local Municipality staff on a daily basis. The WWTW/Oxidation Pond System in Niekerkshoop is utilised for the sewer effluent from the conservancy tanks transported by tankers to the Works. The WWTW is in a process of being upgraded and the Council has submitted Business Plans to the relevant MIG Offices for possible funding of the project. No return flows from the oxidation ponds are available and no quality tests are done. The tanker loads dumped per day are captured in the Registers to determine the inflow volume.

8 First order assessment, DWA

9 Calculation made based on size of ponds measured from Google maps

10 Calculation made based on size of ponds measured from Google maps

[11]WRP Consulting Engineers, DMM, Golder, KV3, Zitholele (2009) *Development of a Reconciliation Strategy for All Towns in the Central Region, Frances Baard District Municipality in Northern Cape Province: Reconciliation Strategy for Marydale Town in Siyathemba Local Municipality in the Lower Vaal WMA*, Department of Water Affairs. P.16

[12]WRP Consulting Engineers, DMM, Golder, KV3, Zitholele (2009) *Development of a Reconciliation Strategy for All Towns in the Central Region, Pixley ka Seme District Municipality in Northern Cape Province: Reconciliation Strategy for Niekerkshoop Town in Siyathemba Local Municipality in the Lower Vaal WMA*, Department of Water Affairs. P.162

PRIESKA[13]

The Sanitation System in the Prieska community consists of an internal sanitation system with waterborne sanitation network and onsite sanitation facilities. Furthermore, there are some septic tanks in areas not serviced with the sewer network.

The waterborne sewage contents gravitate through a network of underground sewer pipes to various collection sewage pump stations. Electrical driven submersible sewage pumps transfer the sewage to a main sewer pump station. From this pump station, another set of electrical driven submersible pumps pump the sewage to the Prieska Wastewater Treatment Plant.

The Wastewater Treatment Plant is an Anaerobic oxidation Pond System. The current capacity of the ponds is 2.2 Mℓ/day and the capacity used, is 95%. All final water or effluent is pumped to the Prieska Golf Club for irrigation of the lawns and fields. The final effluent is not disinfected with chlorine at this stage.

The ponds were upgraded during 2008. No laboratory tests are available on the waste water quality of the Prieska WWTW. Bucket sewage contents are emptied into a tanker and are transported to the Wastewater Treatment Plant.

5.1.2.2 Level of Service

The Municipality progressed very well in reaching the National Target to eradicate sanitation needs in their area of jurisdiction. According to the DWA Geodata base, the following level of services are provided:

a. Formal

Settlement	Households 2011	Flush to network	Conservancy tank	VIP	Bucket	None	Unknown	TOTAL SANITATION FORMAL HH
Marydale	785	0	264	213	173	1	0	477
Niekerkshoop	493	0	161	295	0	31	3	456
Prieska	3,089	2,660	0	58	0	307	0	2,718
TOTAL	4,367	2,660	425	566	173	339	3	3,651

[13]WRP Consulting Engineers, DMM, Golder, KV3, Zitholele (2009) *Development of a Reconciliation Strategy for All Towns in the Central Region, Pixley ka Seme District Municipality in Northern Cape Province: Reconciliation Strategy for Prieska Town in Siyathemba Local Municipality in the Lower Vaal WMA*, Department of Water Affairs. P.16

b. Informal

Settlement	Households 2011	Flush to network	Conservancy tank	VIP	Bucket	None	Unknown	TOTAL SANITATION INFORMAL HH
Marydale	785	0	0	0	129	0	0	0
Niekerkshoop	493	0	0	0	0	0	0	0
Prieska	3,089	0	0	0	0	0	0	0
TOTAL	4,367	0	0	0	129	0	0	0

5.1.2.3 Free Basic Services[14]

Siyathemba Municipality is providing free basic sanitation services to all the indigent households. These households do not pay the monthly rates and taxes on sanitation services. For buckets, VIP and conservancy tanks, the service are 100% subsidised by the Municipality. In the case of full waterborne sanitation, 70% of the rates and taxes are paid by the Municipality as part of Free Basic Services.

An Indigent Policy is available which provides the detail with regards to who qualify as an indigent. The Register is updated on an annual basis.

During the 2010/11 financial year, 49% of the households were registered as indigents.

5.1.2.4 Planning

The Municipality does not have any type of Master Plan Document available for sanitation services. Previously, it was addressed as part of the WSDP, but since the responsible Department has changed from DWA to CoGHSTA, this service is no longer discussed in detail in the WSDP.

It should however be noted that most of the critical issues with regards to sanitation service delivery, internal and bulk, have been addressed.

The Municipality is however in the process to compile a Wastewater Risk Abatement Plan to address all the risks with regards to wastewater management. The focus of this Plan is however on management issues and not specifically to improve the level of services and the upgrade of infrastructure.

5.1.2.5 Operation and Maintenance

The Municipality does not have an Operation and Maintenance Master plan available for their entire sanitation infrastructure. This activity is listed as a possible project for future years.

14 Interview J Badenhorst, 2012-04-13

The Municipality is however doing regular maintenance on their entire infrastructure.

5.1.2.6 Quality

The Municipality participated in the Green Drop Certification Programme implemented by the Department of Water Affairs.

An overall score of 18% were obtained. The specific Waste Supply System scored the following:

- Marydale: 15.2%
- Prieska: 21.9%
- Niekerkshoop: 17%

The following regulatory comments were made in the Green Drop Report 2011:

The Siyathemba Local Municipality has digressed markedly from their fairly good 2009 Green Drop scores (65-71%) to very poor ratings of 15-21% currently. These scores are pointing at some significant factors and decision that has been effected within the municipality, to allow such disgraceful digress in performance. The gaps in the current performance are reaching across all spheres of what is considered good practice in wastewater management. Five assessment areas were scored with 0%, whilst the remainder 4 areas did not fare much better to instil confidence. Of interest is that the technical site visit did not concur with the evidence presented by the municipal staff during the assessment. The Prieska Plant, although not excellent, showed a site that is well maintained and properly operated. This would indicate either a low preparedness for the Green Drop Assessment or a focus on technical site work and not so much the administrative and managerial functions of the wastewater services business.

The overall trend for Siyathemba is therefore a strong negative, and is further evidenced by the CRR trends which indicate that 2 of the Plants are in now in **critical risk space** with a **100% CRR**. This situation demands the urgent attention of municipal management and provincial Local Government. Regulatory actions will be triggered via these findings.

Green Drop Findings:

2. Three of the 3 Wastewater Treatment Plants do not have adequate monitoring regimes in place. With this failure, comes the lack of credible scientific testing and reporting.
10. 100% of the plants are not in compliance with the Effluent Quality Discharge Standards employed within the Municipality.
11. None of the 3 Systems have capacity evidence or plans to rectify the non-compliance scenario, with the exception being Prieska.

12. Basic systems, procedures, manuals and processes are lacking for all 3 Systems, which is evident of management dis-functionality.
13. Underlying to the above findings is the evidence that adequately qualified and registered staff is not in place, and that resources are not readily mobilised to address the gaps reported to Management.

5.1.2.7 Related Projects

During the 2011/12 financial year, the Municipality received funds from DWA from the Accelerated Community Infrastructure Programme (ACIP). This grant was utilised to refurbish sanitation infrastructure and equipment . The following were done:

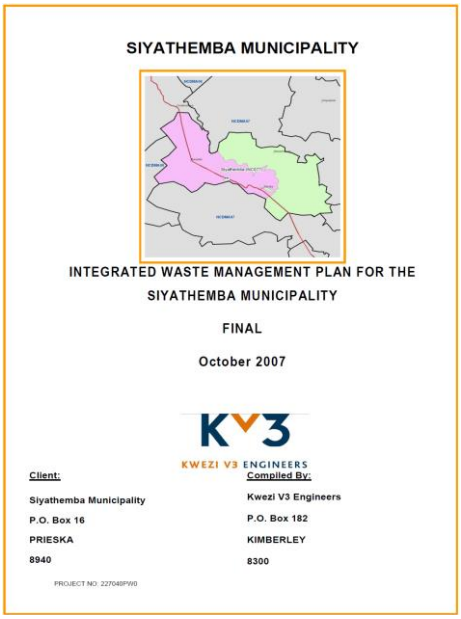
Table 9: Sanitation Related Projects

Town	Activities
PRIESKA	Purchase of Two standby sewer pumps (No.2) Aangekoop??? Refurbishment of sewer tanker intake (No. 1) Replacement of manhole covers at main sewer pump sets
MARYDALE	Refurbishment of sewer tanker intake Refurbishment/Replacement of night soil suction tanker Fence oxidation pond area
NIEKERKSHOOP	Refurbishment of sewer intake to oxidation ponds Refurbishment/Replacement of sewer tanker

5.1.2.8 Challenges

1. The wastewater treatment facility in Marydale does not function as a proper wastewater treatment works.
14. There is still bucket toilets in the area which needs to be eradicated as a matter of urgency.
15. VIP toilets are collapsing. These households do not have access to a safe and decent sanitation facility.
16. A high percentage of households do have access to a sanitation facility which is in line with minimum standards. The municipality however aims to provide waterborne sanitation to all households. There are dry sanitation facilities which needs to be upgraded.
17. Households in the informal area in Prieska does not have access to proper sanitation facilities. There are however vacant erven which do have proper services. These people need to be relocated to these areas.
18. The municipality are doing maintenance of infrastructure on an adhoc basis. A proper Operation and Maintenance plan needs to be developed for all the water infrastructure/assets.
19. Currently the Municipality are not providing any services on farm areas. A strategy needs to be developed with regards to the latter.
20. The Green drop score for the municipality is still very low. General wastewater management needs to be improved.

5.1.3 WASTE MANAGEMENT[15]



All households to have access to at least once-a-week refuse removal services.

An Integrated Waste Management Plan was compiled for Siyathemba Municipality during 2007 and the document was finalised during October 2007.

The services which the Municipality is delivering are categorised as follows:

- Refuse removal
- Street cleansing
- Landfill sites, transfer stations and bulk containers

The Municipality is rendering this service internally and it is coordinated from Prieska. The service delivery for the various towns is managed from the Local Service Delivery Centres due to the distance of the towns from each other. There are also no private waste contractors active within the municipal area.

The Siyathemba Municipality does not have a set of Bylaws which comprehensively address the Council's responsibility for the removal of refuse, management of disposal facilities, waste minimisation, illegal activities, payment of fees and penalties.

There are currently no formal Municipal driven waste minimisation activities taking place in the Siyathemba Municipality. However, the Municipality is assisting one individual to recycle glass bottles from the landfills.

The Municipality is also currently not offering any recycling incentives to private people or businesses.

5.1.3.1 Waste Removal

A regular waste removal service is provided to all the urban areas within the Municipality. The farming areas of the Siyathemba Municipality do not receive a waste removal service. The provision of such a service is at the moment not envisaged by the Municipality.

15 Integrated waste management plan for Siyathemba Municipality October 2007

The Siyathemba Municipality utilises a Black Refuse Bag System. Residents have to buy their own refuse bags. The Municipality accepts any number of bags per household, so there is no specific limit. The bags are placed on the curb outside the house and collected from there. In some areas in Prieska, as well as in Marydale and Niekerkshoop, people put out their refuse bins from where it is emptied onto a truck.

Waste removal service, residential and businesses, are done once a week.

The Municipality charge 49.57 per month per household to delivery this service.

In all the towns within the municipal area, small amounts of garden waste are collected together with general household waste.

There is one Provincial Hospital (in Prieska) and smaller Medical Clinics in Niekerkshoop and Marydale. The Municipality is not involved in the removal of any medical waste from these Institutions. The medical waste is collected by SANUMED and incinerated and disposed of in the Free State. The Municipality does not experience any problems with medical waste at the landfill sites.

Industries in the area are mostly confined to light industries. The Municipality is currently not experiencing any problems with regard to the disposal of hazardous waste from industry or mining activities on the existing disposal facilities.

Street sweeping is done in the CBD's of areas of Prieska, Niekerkshoop and Marydale. There is no street sweeping in the residential areas and the residential areas will only be cleaned if it is necessary to do so.

5.1.3.2 Waste Disposal

Each of the towns has its own solid waste disposal site.

Table 10: Waste disposal

Town	Site
Prieska	Existing permitted landfill site
Marydale	Existing unauthorised landfill site
Niekerkshoop	Existing unauthorised landfill site

a. **Prieska**

The landfill in **Prieska** is a Class G:C:B$^-$ permitted site. The site has approximately enough airspace for the next 20 years. The site is not well managed due to certain financial and personnel constraints. The waste is not covered on a regular basis and is burned once disposed of. The site is not fenced and access is not controlled. No record-keeping takes place at the entrance to the site. Wind-blown litter is a serious problem at the site. There was one employee stationed at the site.

Table 11: Prieska Landfill Site

Position of site:	**4 km south of town.**
Permit:	Yes
Year issued:	14/4/2003
Classification of site:	Class G:C:B-
Type of Operation (end – tip, trench, cell):	There is only a large area excavated for dumping purposes. Waste is disposed haphazardly and burned.
Estimated size of site:	Approximately 2 ha.
Estimated remaining life of site:	The remaining life of the site is 20 years
Separation of fresh and contaminated water:	None in place.
Groundwater monitoring:	Not required in permit
Volumes per day, week or month:	It is estimated that the site receives approximately 76 tonnes per week.
Is cover material available?	No
Is the drainage sufficient?	No
Is there access control?	No
Is the site fenced?	No.
Does the site have a sufficient buffer zone?	Yes. No houses situated in the proximity of the site.
Type of equipment utilised on site:	None
Operating hours:	7h30 to 16h30
Estimating cost for closure:	No estimate regarding closure exists. Due to the extended life of the site, the Saving Plan is not in place yet.
Saving Plan for closure:	

In general, the proposed Works can be summarized in the following projects and activities:

- Clean the area outside the throughput
- Bulldozed, compact and covered waste with a gravel layer
- Build a new incinerator with separation cages and dump area
- Replace the old incinerator with a new incinerator
- Excavate a new through put

b. Niekerkshoop

The landfill site at **Niekerkshoop** is located 7 km outside town. The site is fenced (needs maintenance), but access is not controlled. The open burning of waste in a pit forms part of the operational procedure for the site. The waste is not covered on a daily basis due to the absence of proper landfill equipment. The operation of the site is not up to an acceptable standard.

Table 12: Niekerkshoop Landfill Site

Position of site:	**7 km east of town**

Permit:	No
Year issued:	N/A
Classification of site:	Not permitted - no classification.
Type of Operation (end – tip, trench, cell):	Site is an open pit where waste is burned indiscriminately.
Estimated size of site:	Approximately 2.5 ha.
Estimated remaining life of site:	20 years
Separation of fresh and contaminated water:	None in place.
Groundwater monitoring:	No groundwater monitoring takes place.
Volumes per day, week or month:	It is estimated that the site receives approximately 4 tonnes per week.
Is cover material available?	No
Is the drainage sufficient?	No
Is there access control?	No
Is the site fenced?	Yes, however the existing fence needs some maintenance
Does the site have a sufficient buffer zone?	Yes, the site is situated some distance away from the town.
Type of equipment utilised on site:	None
Operating hours:	None
Estimating cost for closure:	No estimate regarding closure exists. The Municipality must budget for the closure and rehabilitation in the near future.
Saving Plan for closure:	

c. Marydale

The **Marydale landfill site** is located 3 km north of town. The site is not fenced and access is not controlled. Wind-blown litter is also a serious problem in the vicinity of the site. There is no landfill equipment on the site and therefore covering of the waste does not occur at all. The site is not properly operated with waste being disposed of haphazardly and burned after disposal.

Table 13: Marydale landfill site

Position of site:	**3 km North of town**
Permit:	No
Year issued:	N/A
Classification of site:	Not permitted - no classification.
Type of Operation (end – tip, trench, cell):	Site is an open pit where waste is burned indiscriminately.
Estimated size of site:	Approximately 1.5 ha.
Estimated remaining life of site:	Expected to be 20 years
Separation of fresh and contaminated water:	None in place.
Groundwater monitoring:	No groundwater monitoring takes place.
Volumes per day, week or month:	4.4 tonnes/week
Is cover material available?	No
Is the drainage sufficient?	No
Is there access control?	No
Is the site fenced?	No

Position of site:	**3 km North of town**
Does the site have a sufficient buffer zone?	Yes
Type of equipment utilised on site:	None
Operating hours:	7h30 to 16h30
Estimating cost for closure:	No estimate regarding closure exists. The Municipality must budget for the closure and rehabilitation in the near future.
Saving Plan for closure:	

In general, the proposed Works can be summarized as follows:

- Opening up of new cells
- Building of ablution facilities and control / storage room
- Erection of fence and access gate
- Clean the area outside the throughput
- Bulldozed, compacted and covered waste with a gravel layer
- Re-gravel the access road
- Construction of a low water bridge.
- Storm water Control

5.1.3.3 Equipment

The Siyathemba Municipality has a few vehicles that are old and are due for replacement. The tipper truck utilised in Prieska for example, is in need of replacement. The Municipality is responsible for the maintenance of their own vehicles.

The equipment that is utilised by the Siyathemba Municipality is given below in the Table below.

Table 14: Vehicles

REG NUMBER	MODEL	VEHICLE DESCRIPTION	CONDITION*	Based
DBR 984 NC	1985	Isuzu Tipper truck (6m^3)	Bad	Prieska
BFN 334 NC	1993	Tractor Trailer	Fair	Niekerkshoop
BFD 423 NC	1977	Tractor Trailer	Bad	Marydale

*Note that the indicated **VEHICLE CONDITION** is a subjective as assessment of the vehicles and no mechanical assessment of the vehicles had been conducted for this Study.

The Siyathemba Municipality has no transfer stations within the municipal area.

5.1.3.4 Related Projects

2 MIG Projects are ongoing in Prieska and Marydale to upgrade the landfill sites in order to comply with legislation. These projects are MIG Projects with a value of R3,9930 million.

5.1.3.5 Challenges

- Illegal dumping of waste is common in several of the outlying and township areas. The Municipality has to collect this waste at an unnecessary cost. The Siyathemba Municipality has recognized the need for education of the people regarding this practice; however,

nothing has yet been implemented. The Municipality is also experiencing dumping of waste in areas not demarcated for waste disposal.

- Waste volumes are also not recorded at the entrances to the disposal sites.
- There are no Waste Minimization Strategies that have been developed. These need to be addressed and implemented.
- The new developments that are taking place in the Siyathemba Municipality must be included for the provision of a waste disposal service.
- Illegal dumping of waste is common in several of the outlying and township areas. The illegal disposal should be addressed in order to manage and minimize the illegal activities pertaining to waste disposal.
- New Municipal Bylaws should be drafted by the District Municipality (for use by the Local Municipalities within the District) that pertain directly to waste and issues surrounding waste management. Issues such as waste minimization and recycling, etc., should be dealt with in the Bylaws.
- The Siyathemba Municipality has a shortage of personnel, specifically with regard to the management of the disposal sites. Limited or no personnel are present at the disposal sites. Vacant posts should be filled and posts should be created for the management of the disposal sites.
- The Siyathemba Municipality has a few vehicles that are old and in poor condition that are due for replacement.
- The Niekerkshoop and Marydale disposal sites are not authorized. The process to authorize these disposal facilities should be initiated by the Municipality. The operation of these sites is not up to standard. The sites should be upgraded (properly fenced/secured, guard house with ablution) and the operations should be improved in accordance with the Minimum Requirements for Waste Disposal by Landfill document.
- The Prieska Disposal Site should be upgraded (fenced, guard house and ablution facility) and operated in accordance with the Permit Conditions for the site, as well as the Minimum Requirements for Waste Disposal by Landfill as published by the Department of Water Affairs.
- Access should be controlled at the disposal facilities and a record should be kept of the types and volumes of waste that is being disposed of at each site.
- Municipal waste records should be kept and maintained for informed future decision-making purposes and to comply with the Government's Waste Information System requirements.
- A Mitigation Strategy or some form of succession planning should be developed for the expected increase in HIV-AIDS related deaths amongst personnel.
- A Public Awareness and Education Programme should be implemented consisting of flyers, newspaper notices and road shows.

- The Municipality does not have a Air Quality Management Plan. Since Prieska is situated in close fasinity of the SKA development, a decision needs to be taken whether the development of such a plan should be prioritised.

5.1.4 ELECTRICITY/ENERGY

All households to be connected to national grid.

Siyathemba Municipality, together with ESKOM, is responsible for electricity supply in the 3 towns.

Table 15: Responsible Institution

	Internal network	Public lighting
Prieska	LM and ESKOM	LM
Niekerkshoop	ESKOM	LM
Marydale	ESKOM	LM

In the LED Strategy of the Municipality, the following Table was included. Reference were made that spatial projections based on Census 2001 and Quantec Research 2012 were used. It is also said that it was estimated that some 85% to 90% of households in the Municipal area had access to electricity during 2010.

Table 16: Access to Electricity

Sub-Place	Number of Households		Level of Access
	2001	2010	
E'Thembeni SP	585	790	75.9%
Marydale SP	412	556	84.2%
Niekerkshoop SP	399	539	90.9%
Prieska SP	520	702	82.1%
Lemnertsville	1165	1 574	96.4%
Hay NU	88	119	58.6%
Prieska NU [Part of P3D03M07M05]	393	531	80.2%
Westerberg SP	1	1	100.0%
Total	**3561**	**4 812**	**85.2%**

The level of household access to electricity has improved slightly from 85.4% in 2001 to over 87% during 2010. Most farms in the area procure their electricity directly from ESKOM.

The Municipality has an Electricity Master Plan available which was developed in the early 2000. The Municipality works according to this Plan to upgrade electricity infrastructure, as well as to develop new infrastructure.

Electricity service is done by the municipality in a part of Prieska. This is the smallest section in the infrastructure department and the staff establishment is currently 5 employees.

Two areas in Prieska still need to be upgraded because the electricity network is old and power failures occur. The Municipality applied for money to upgrade it, but all applications at the Department of Energy have been turned down, because they argue that INEP funds cannot be allocated for the upgrading of existing electricity infrastructure. The biggest part of Prieska, as well as the whole of Marydale and Niekerkshoop, is being supplied by ESKOM directly to customers.

Apart from meter inspections and new installations, maintenance work is done that relate to complaints received or faults which occur. Maintenance work includes:

- Maintenance of high and low voltage networks
- Maintenance of street and high mast lights
- New and maintenance of house connections
- Maintenance of electrical equipment at municipal installations and buildings such as water treatment works, borehole submersible pumps, sewerage pumps stations, waste water treatment works, etc.
- Offices
- Community halls

The electrical service provides a standby service on a full time (24 hrs) basis in order to react to complaints and limit power failure to a minimum.

5.1.4.1 Challenges and Areas to Improve Service Delivery

1. The Master plan for the Municipality was developed during 1998. This plan needs to be revisited and updated.
21. The Municipality need to complete the MIG projects registered during the previous financial years.

5.1.5 STORM WATER

Very little infrastructure exists within the Municipality. There is only a small portion of Prieska where storm water infrastructure exists.

The Municipality does not have an Storm Water Management Plan.

5.1.5.1 Challenges and Areas to Improve Service Delivery

1. Development of a Storm Water Management Plan which will assist the Municipality to phase in this service on a sustainable and cost effective manner.

5.1.6 SOCIAL SERVICES

5.1.6.1 Housing

The Municipality appointed ASLA Devco (Pty) Ltd on a 3 year contract to act as a Turnkey Implementing Agent for housing and housing related infrastructure. The Team started to develop a Housing Action Plan, with the aim to ensure effective allocation of limited resources, to provide a formal and practical housing priority for implementation and identify the Strategic Implementation Plan for the housing need in Siyathemba Municipal Area. The Municipality therefore does not have an Approved Housing Sector Plan, but a Draft Housing Action Plan is available.

The Municipality does not have updated figures available regarding the housing need in their area of jurisdiction. This is a major challenge for the Municipality and proper planning cannot be done since status quo information is not available. As soon as data is available with regards to the housing need in the area, the Municipality will have a better understanding of the challenges in terms of housing and will be in a better position to identify specific housing subsidy schemes (BNG, rental, ect) to address these needs.

During 2010, the following information was captured in the Housing Plan: Data Collection and Project Readiness.

Table 17: Housing Needs

MUNICIPALITY	HOUSING NEED	NUMBER OF SITES AVAILABLE FOR 2010/11
SIYATHEMBA TOTAL	3,502	642
Marydale	1,292	115
Niekerkshoop	521	60
Prieska	1,689	467

The allocation for Siyathemba Municipality is relatively small. The Municipality is therefore struggling to address the housing need in the area. With the Housing Allocation to date Siyathemba manage to build 20 and 203 new RDP houses units in Prieska in to the values of R1, 804,000.00 and R20, 354, 233.86 respectively. A new application for 310 plots for Prieska, 55 for Marydale and 54 Niekerkshoop was submitted with COGHSTA. This application is to service the sites in Prieska and for Bulk services and for the Top Structures and Conservancy Tanks in both Marydale and Niekerkshoop.

These Areas earmarked for new housing development and extensions are the indicated in the figures below:

Figure 3: Prieska Housing Development Area

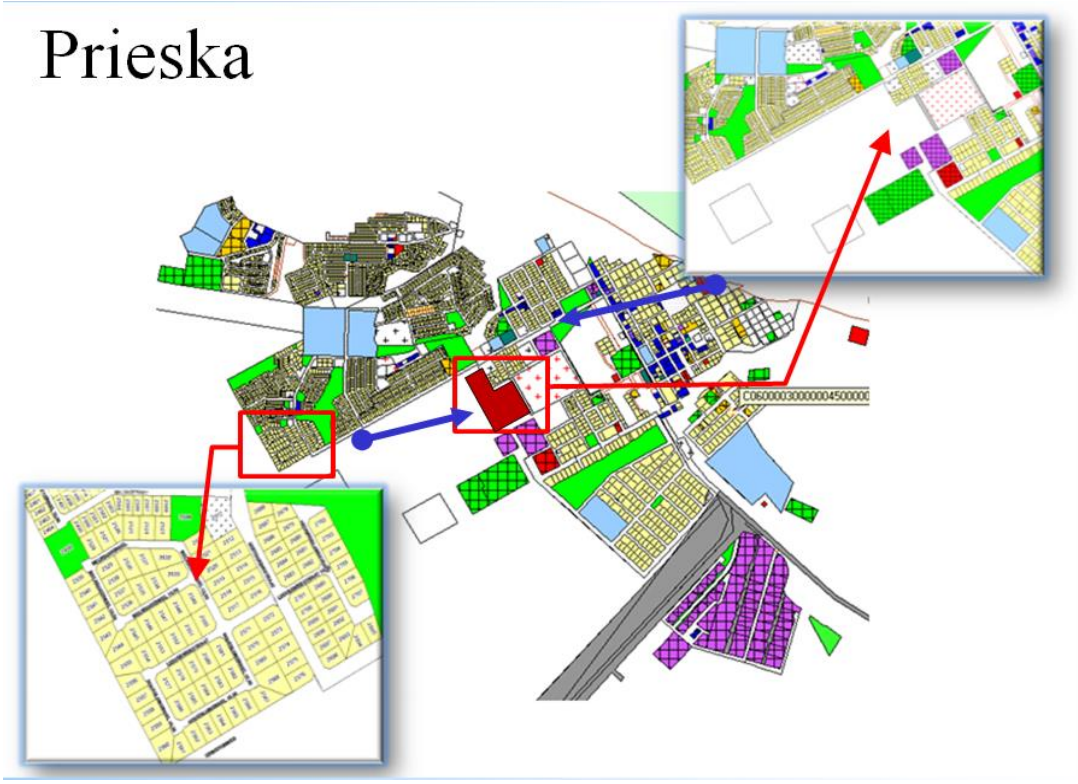


Figure 4: Marydale Housing Development Area

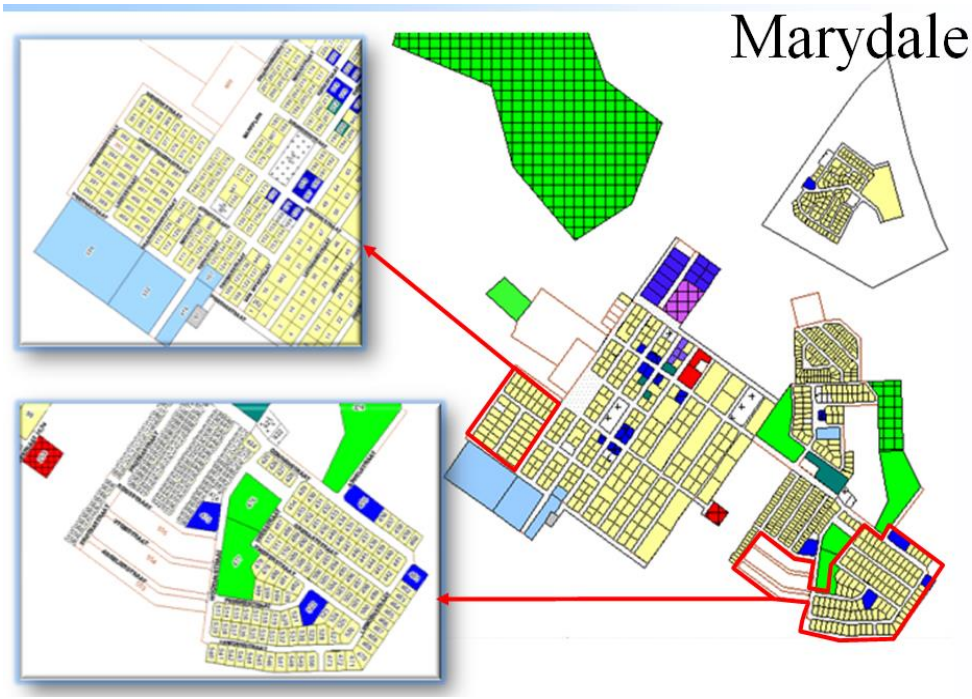
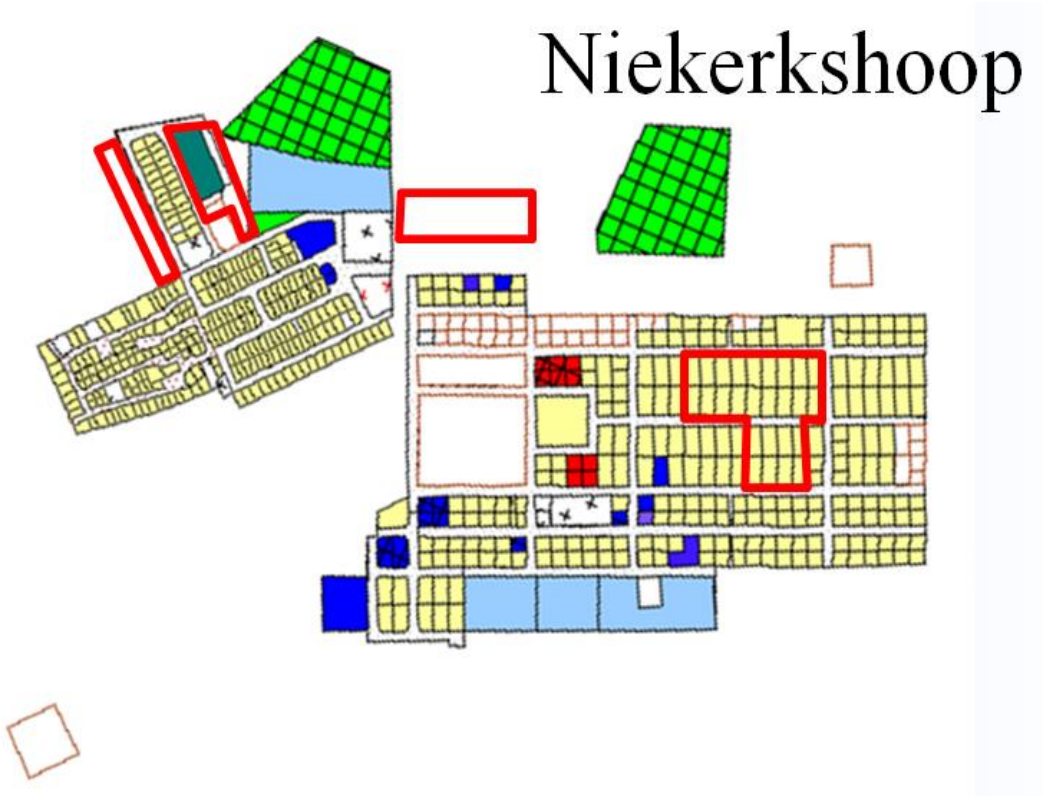


Figure 5: Niekerkshoop Housing Development Area



Other housing projects which are currently in the pipeline are the following;

- Fairview Extension 15, Prieska. The Business Plan was prepared for the servicing of 310 erven and the construction of top structures. The signature from the Municipal Manager is awaited.
- Marydale 55 and Niekerkshoop 54: Business Plans for the construction of top structures have been submitted to CoGHSTA.

5.1.6.2 Challenges and Areas to Improve Service Delivery:

1. The Municipality does not have proper and realistic information with regards to the housing need in the area.
22. The Implementing agent, together with the municipality started with the development of a Housing Action plan. The aim of this plan needs to be revisited in order to ensure that it can fulfil the role of an Integrated Housing Sector plan. Thereafter the plan needs to be finalised.
23. The Municipality does not have a Spatial Development Plan/Framework to guide development in the area.
24. Progress with regards to the relocation of the Koegas settlement is very slow. The municipality should only play a facilitators role in this regard.

5.1.7 HEALTH SERVICES

The following health facilities are available within the jurisdiction area of the Municipality:

Type of Clinic	Clinic name	Town/village name	Sufficient sanitation services	Sufficient water services
Permanent Clinic	Niekerkshoop Clinic	Niekerkshoop	Yes	Yes
Permanent Clinic	E'Thembeni Clinic	Prieska	Yes	Yes
Permanent Clinic	Marydale PHCC	Marydale	Yes	Yes
Permanent Clinic	Prieska Clinic	Prieska	Yes	Yes

The Municipality does not experience much challenges with regards to the availability of Clinics and/or Hospitals. The support services such as roads, electricity, water and sanitation are also sufficient.

The Mayor mentioned the following in the Annual Report:

> "We are well covered by a Hospital in Prieska, Clinics in Niekerkshoop and Marydale and at present, we face challenges in the areas of ambulances (Niekerkshoop), and Medical Practitioner shortages. Medicine shortages are in the process to be addressed."

According to the Service Transformation Plan of the Department of Health, Prieska qualifies for a Community Health Centre. No information is however available on when such a facility will be constructed.

5.1.7.1 Challenges

1. Niekerkshoop does not have any Ambulance services. Negotiations with Dept of health should be initiated to identify possible solutions.
25. It is indicated that Prieska community qualify for a Community Health Facility. The municipality only have limited information with regards to this proposed project. Negotiations with Dept. of health should be initiated to develop a plan of action.

5.1.7.2 Education

The following Schools are within the Municipal area:

School name	Town/village	Learner enrolment total	Educator Total	Admin & support - Total	Type of school
Bloukrans School	Farm	78	3	2	Combined
Modderfontein (Sskv) School	Farm	35	1	0	Primary
Sonskyn School	Marydale	678	19	4	Combined
Môreson School	Niekerkshoop	473	15	4	Primary
Hoërskool Prieska	Prieska	378	20	9	Combined

J.J. Dreyer School	Prieska	830	24	6	Primary
R.D. Williams School	Prieska	980	27	9	Primary
Prieska School	Prieska	330	11	5	Primary
Redlands School	Prieska	42	2	0	Primary
Heuwelsig School	Prieska	990	29	8	Secondary

The Municipality does not experience much challenges with regards to the availability of schools. The support services such as roads, electricity, water and sanitation are also sufficient.

5.1.7.3 Other Services

In the table below, a short description is also given on other services which form part of the Infrastructure and Service Delivery Division within the Municipality:

Table 18: Other Services

Service line	Status quo
Safety and Security	There is a Police Station in each of the 3 towns. There is no fire brigade in the municipal area. The Municipality does not have a Disaster Management Plan. A Community Safety Plan is developed. The Municipality is in the process to obtain a copy of this plan.
Town Planning and Building Centre	The staff involved in Town Planning and Building Centre provides information to other Departments, as well as Consulting Engineers and Consultants regarding proposed developments and land information on a continuous basis.
Cemeteries	The Council has 3 cemeteries in Prieska where burials take place. Currently, we are busy with a MIG Project to upgrade one of them because more space becomes essential. In Niekerkshoop and Marydale there are also 2 cemeteries in each town where burials take place. In Niekerkshoop and Marydale, we are currently also busy with a MIG Project in order to upgrade 2 cemeteries because more space is needed for burials.
Airfield	The Airfield in Prieska is suitable for airplanes to land and take off. There are 2 gravelled runways that are gravelled regularly. This airfield is registered with the Civil Aviation Authority and is inspected by them every year after which a license is issued to the Municipality.
Commonage	The Municipality's commonage covers an area of 33 000 ha. The commonage is currently used mainly by emerging farmers. Infrastructure on the

commonage is being vandalized by thieves who remove fences, windmills and other infrastructure.

5.1.8 SUMMARY OF PROJECTS TO ENHANCE SERVICE DELIVERY

INFRASTRUCTURE PRIORITY FOCUS for 2014/2015

5.1.8.1 Provision of water
5.1.8.2 Waste Water Services
5.1.8.3 Public Lightning
5.1.8.4 Upgrade of Gravel Roads to Tarred and Block Paving Roads
5.1.8.5 Refuse Removal and landfill Sites
5.1.8.6 Service of New Sites for Housing Purposes
5.1.8.7 Community Facilities such as Cemeteries, Community Halls, etc.

MIG PROJECTS TO BE IMPLEMENTED	2014/15	2015/16	2016/17
UPGRADE GRAVEL ROADS	5 000 000	6 000 000	6 500 000
MARYDALE UPGRADE OF INTERNAL RECTICULATION	3 700 000	-	-
MARYDALE UPGRADE OF EXTERNAL BULK WATER SUPPLY	1 100 000	-	-
Marydale upgrade of sport facility	-	3 986 373	-
Upgrade of VIP Toilets Prieska	3 200 000	6 500 000	7 000 000

PROJECT SPENDING SINCE 2008

Year – 2013/14 (6 Months)

Project name	Project value	Year Funded	Project area	Grants & Investment
Upgrading of Solid waste	270 937	2013/2014	Marydale	270 937
Upgrading of Solid Waste	244 664	2013/2014	Prieska	244 664
Upgrading of water supply infrastructure	296 642	2013/2014	Marydale	296 642
Upgrading of Gravel streets	2 368 829	2013/2014	Siyathemba	2 368 829
Expansion of existing cemetery	0	2013/2014	Marydale	0
Waste water treatment works	2 158 884	2013/2014	Marydale	2 158 884
Prieska Development of New Cemetery	0	2013/2014	Siyathemba	0
High Mast Lights	1 330 935	2013/2014	Siyathemba	1 330 935
MIG – Sundry (Not included in above Projects)	3 292 109	2013/2014	Siyathemba	3 292 109
Integrated National Electrification Grant (INEP)	2 400 000	2013/2014	Siyathemba	2 400 000
Municipal Systems Improvement Grant (MSIG)	890 000	2013/2014	Siyathemba	890 000
Financial Management Grant (FMG)	1 650 000	2013/2014	Siyathemba	1 650 000
Department of Water Affairs (DWA)	2 648 424	2013/2014	Siyathemba	2 648 424
Sports Arts and Culture (Library)	605 500	2013/2014	Siyathemba	605 500
Expanded Public Works (EPW)	700 000	2013/2014	Siyathemba	700 000
Public Works – Pula Nala	0	2013/2014	Siyathemba	0
Equitable Share	15 133 000	2013/2014	Siyathemba	15 133 000
	33 989 924			**33 989 924**

Year – 2012/13

Project name	Project value	Year Funded	Project area	Grants & Investment
Access Roads	177 094	2012/2013	Prieska	177 094
Upgrading of Solid waste	815 436	2012/2013	Marydale	815 436
Upgrading of Solid Waste	1 527 621	2012/2013	Prieska	1 527 621
Upgrading of water supply infrastructure	261 979	2012/2013	Marydale	261 979
Upgrading of Gravel streets	3 759 163	2012/2013	Siyathemba	3 759 163
Expansion of existing cemetery	42 929	2012/2013	Marydale	42 929
High mast Lighting	1 096 404	2012/2013	Siyathemba	1 096 404
Waste water treatment works	797 914	2012/2013	Marydale	797 914
Development of New Cemetery	1 894 251	2012/2013	Prieska	1 894 251
High Mast Lights	2 106 534	2012/2013	Siyathemba	2 106 534
Integrated National Electrification Grant (INEP)	2 400 000	2012/2013	Prieska	2 400 000
Integrated National Electrification Grant (INEP)	1 200 000	2012/2013	Prieska	1 200 000
Municipal Systems Improvement Grant (MSIG)	800 000	2012/2013	Siyathemba	800 000
Financial Management Grant (FMG)	1 500 000	2012/2013	Siyathemba	1 500 000
Department of Water Affairs (DWA)	7 792 465	2012/2013	Siyathemba	7 792 465
Sports Arts and Culture (Library)	344 500	2012/2013	Siyathemba	344 500
Expanded Public Works (EPWP)	1 000 000	2012/2013	Siyathemba	1 000 000
Public Works – Pula Nala – Upgrading of Halls	2 500 000	2012/2013	Siyathemba	2 500 000
Equitable Share	20 108 000	2012/2013	Siyathemba	20 108 000
Service of 205 Sites in Prieska	6 7000 000	2012/2013	Prieska	6 700 000
Building of 203 Houses	-	2012/2013	Prieska	-
	56 824 290			**56 824 290**

Year – 2011/12

Project name	Project value	Year Funded	Project area	Grants & Investment
924:Upgrading of Solid waste	126 612	2011/2012	Marydale	126 612
923:Upgrading of Solid Waste	91 105	2011/2012	Prieska	91 105
926:Upgrading of water supply infrastructure	2 289 481	2011/2012	Marydale	2 289 481
1028:Upgrading of Gravel streets	1 773 680	2011/2012	Siyathemba	1 773 680
927:New Cemeteries Feasibility study	95 536	2011/2012	Prieska	95 536
929:Development of New Cemetery	1 623 962	2011/2012	Niekerkshoop	1 623 962
928:Expansion of existing cemetery	2 108 422	2011/2012	Marydale	2 108 422
1105:Highmast Lighting	1 641 682	2011/2012	Siyathemba	1 641 682
MIG – Sundry (Not included in above Projects)	495 520	2011/2012	Siyathemba	495 520
Integrated Nat. Electrification Grant (INEP)	0	2011/2012	Siyathemba	0
Mun. Systems Improvement Grant (MSIG)	790 000	2011/2012	Siyathemba	790 000
Financial Management Grant (FMG)	1 450 000	2011/2012	Siyathemba	1 450 000
Department of Water Affairs (DWA)	5 544 503	2011/2012	Siyathemba	5 544 503
Sports Arts and Culture (Library)	542 000	2011/2012	Siyathemba	542 000
Expanded Public Works (EPW)	529 000	2011/2012	Siyathemba	529 000
Transport – Roads	1 605 191	2011/2012	Siyathemba	1 605 191
Equitable Share	17 829 000	2011/2012	Siyathemba	17 829 000
	38 535 694			**38 535 694**

Year – 2010/11

Project name	Project value	Year Funded	Project area	Grants & Investment
MIG	7 026 000	2010/2011	Siyathemba	7 026 000
Municipal Systems Improvement Grant (MSIG)	750 000	2010/2011	Siyathemba	750 000
Financial Management Grant (FMG)	1 200 000	2010/2011	Siyathemba	1 200 000
Sports Arts and Culture (Library)	519 000	2010/2011	Siyathemba	519 000
Equitable Share	15 441 000	2010/2011	Siyathemba	15 441 000
	24 936 000			**24 936 000**

Year – 2009/10

Project name	Project value	Year Funded	Project area	Grants & Investment
High Mast Lights	2 245 000	2009/10	Prieska, Marydale, Niekerkshoop	2 245 000
Tar of gravel Roads	5 442 000	2009/10	Prieska	5 442 000
Sports Arts and Culture	361 000	2009/10	Siyathemba	361 000
Equitable Share	12 346 000	2009/10	Siyathemba	12 346 000
MSIG	850 000	2009/10	Siyathemba	850 000
Financial Management Grant	750 000	2009/10	Siyathemba	750 000
Tar of Roads 2	9 578 260	2009/10	Prieska, Marydale, Niekerkshoop	9 578 260
	31 572 260			**31 572 260**

Year – 2008/09

Project name	Project value	Year Funded	Project area	Grants & Investment
Sewerage Plant	1 600 000	2008/9	Prieska	1 600 000
Tar of gravel Roads	1 735 000	2008/9	Prieska	1 735 000
Sports Arts and Culture	335 000	2008/9	Siyathemba	335 000
Equitable Share	9 253 000	2008/9	Siyathemba	9 253 000
MSIG	182 500	2008/9	Siyathemba	182 500
Financial Management Grant	30 000	2008/9	Siyathemba	30 000
Housing x 40 – Thubilisha	-	2008/9	Marydale	-
	13 135 500			**13 135 500**

5.2 PUBLIC PARTICIPATION AND GOOD GOVERNANCE

Strategic Objective	Promote a culture of participation and good governance
Intended Outcome	Entrenched culture of accountability and clean governance

5.2.1 GOVERNANCE STRUCTURES

The Municipality operates according to a Plenary Executive System where executive powers are exercised by a full meeting of the Municipal Council. The Mayor, Councillor P Papier (ANC), leads the Council comprising of 8 Councillors – 5 ANC, 1 DA and 2 COPE Members.

The area consists of three towns, of which Prieska serves as the seat of the Municipality. Siyathemba Municipality has eight Councillors elected to the Council indirectly and on a proportional basis. The Municipal Council has a Mayor who serves as the Speaker and seven members.

- Ward Councillor: P Papier, ANC (**Mayor**)
- Ward Councillor: F Van Wyk, ANC
- Ward Councillor: D Molepo, ANC
- Ward Councillor: G Speelman, ANC
- Councillor: E Martin, ANC
- Councillor: District R Ithumeleng, ANC
- Councillor: PR G Macdonald, COPE
- Councillor: PR B Titus, COPE
- Councillor: PR G Mackay, DA

Table 19: Availability and Status of Structures

Name of Committee	In place
Internal audit function	The Municipality does not have an Internal Audit Committee in place. The Pixley ka Seme District Municipality is assisting the Municipality with this function.
Audit Committee	The Municipality did establish such a Committee in 2010. It did however not function as prescribed in the MFMA. One of the members also passed away and the Committee was disestablished. The Municipality again re-advertised this position and will appoint a suitable candidate as soon as possible. The aim is to have the Committee functional in the Municipal Financial Year of 2012/13.
Oversight Committee	The Municipality has established a Municipal Public Accounts Committee as stipulated in Section 79 of the Municipal Structures Act. The guidelines, as provided by the Department of Co-Operative Governance and National Treasury were used. The Committee was only established late in the 2011/12 financial year and will therefore only be operational as from the 2012/13

Name of Committee	In place
	financial year.
Ward Committees	There are 4 Ward Committees, one in each of the 4 Wards. The Ward Councillor is the Chairperson for the specific Ward Committee. In general, the Municipality is satisfied with the operations of the Ward Committees.
Council Committees	There are four standing Council Committees, viz. 1. IDP, LED and Infrastructure Development 2. Housing and Social Development 3. Credit Control, Debt Collection and Economic Affairs 4. Performance Management, Systems, Personnel and Council Affairs The specific Councillor is the Chairperson of the various Standing Committees.
Supply Chain Committees	The Municipality has an Evaluation Committee and an Adjudication Committee in place, but currently not a Specification committee.

Other Public Participation Initiatives:

- The Municipality strives to have regular "Council meets the People and Imbizo" sessions on a quarterly basis. During these sessions, the community has the opportunity to communicate any grievances which they might have.
- The Principle Administration Officer also acts as the Communication Officer of the Municipality. This person is responsible for the compilation of a quarterly newsletter. The Newsletter indicates activities which took place in the municipal area during that specific quarter. Announcements such as meetings which take place, documents ready for public comments, etc., are also made in these Newsletters. The Newsletters are currently only available at the 3 Municipal Offices. The aim is to distribute these Newsletters also with the monthly municipal accounts.
- The Municipality developed a website. It is already operational and the Municipality maintained it on a regular basis. The address for the website is www.siyathemba.gov.za
- The Municipality will also distribute flyers to communities if specific announcements need to be communicated.
- The Municipality attends the quarterly District Mayoral Forum meetings. The Mayor of Siyathemba Municipality attends the meetings of this Forum.
- Councilor M van Wyk is co-opted by the Siyathemba Municipality Council to acts on the District Council.
- The Municipality also attends the District Intergovernmental Forum meetings. The Municipal Manager and Chief Financial Officer attend the Technical and Financial IGR meetings, whilst the Mayor of the Municipality attends the Political IGR Forum meetings.

The Library Services render an important educational service to the Siyathemba Community. The aim of the service is to take the Libraries to the people. The main aim of the Siyathemba Library Service is to render an effective and efficient service to the community of Siyathemba. The Library provides information and recreational services to adults, learners and students. This section creates a culture of reading through Educational Programmes. We are also involved with Provincial Library Services in

a Library Development Programme where we address the needs of Libraries through Financial Allocation from Provincial Administration.

5.2.2 MANAGEMENT AND OPERATIONAL SYSTEMS

The availability and status of the various Management and Operational Systems are described in the paragraphs below.

5.2.2.1 Complaints Management System

The Municipality do have a formal Complaints System in place. A Policy was however compiled and the draft was tabled for Council approval. The Policy still needs to be adopted by Council and thereafter it needs to be implemented.

Currently there are mainly 2 platforms used by the communities to communicate grievances, namely:

- Complaints Register at the Municipal Office: Community members can complete this Register. The complaints are given to the Municipal Manager and he again delegates it to the specific Line Manager. There is however no formal procedure in place to provide feedback whether the compliant has been addressed or not.
- Council meets the People: These sessions take place on a Quarterly basis. The Council communicates any new developments with the community members and they again have the opportunity to list their problems, etc.

5.2.2.2 Fraud Prevention Plan

For the 2011/12 financial year, the Municipality did not have any Policy or Plan in place with regards to fraud prevention. The Evaluation and Adjudication Committee's strives to ensure that all tenders are correctly advertised, adjudicated and awarded. A Plan was however drafted late in the 2011/12 financial year and tabled at Council for approval. The Municipality aimed to implement this Plan starting from the 2012/13 financial year onwards.

5.2.2.3 Communication Strategy

The Municipality does not have such a Strategy in place. The Principle Administration Officer also acts as the Communication Officer of the Municipality. This person is responsible for the compilation of a quarterly Newsletter. The Newsletter indicates activities which took place in the municipal area during that specific quarter. Announcements such as meetings which take place, documents ready for public comments, etc. are also made in these Newsletters. The newsletters are currently only available at the 3 Municipal Offices. The aim is to also distribute these Newsletters with the monthly municipal accounts. The Communication Officer also attends a quarterly meeting at the District Municipality.

As can be seen in the above paragraphs (5.2.1, Table 20 and this paragraph), there is a number of activities within the Municipality to ensure transparency and public participation. These activities are however not documented in a formal Communication strategy which can be adopted by Council as well as implemented and monitored. There is a generic Communication and Public participation Policy in place, but is does not guide these initiatives within Siyathemba Municipality.

5.2.2.4 Stakeholder Mobilization Strategy/Public Participation Strategy

The Municipality does not have such a Strategy in place.

5.2.2.5 Records Division

The Records Division is entrusted with the core responsibility of managing the Municipality's official records by means of achieving the records, disposing of certain of those records and the transfer of records to the Provincial Archives. In general, this division manages access to records and also serves as a centre for the receipt, distribution and dispatch of correspondence to and from the public, as well as to Councillors.

5.2.3 CHALLENGES:

5.2.3.1 The municipality succeeded in developing guideline documents and/or establish committees during the 2011/12 financial years. These committees are operational. They are;

5.2.3.1.1 Audit committee

5.2.3.1.2 Oversight committee

5.2.3.1.3 Supply chain committees

5.2.3.2 The wards areas in the Siyathemba area are vast and therefore it is difficult for people to attend ward meetings. The idea is to co-opt a specific person who can attend these meetings and disseminate the information afterwards to a specific area.

5.2.3.3 The Municipality does not have a desk to assist with and support initiative in terms of special groups such as people living with HIV/Aids, youth, violence against women.

5.2.3.4 The Newsletter of the municipality is not yet fulfilling the role as initially anticipated. It can also be distributed much wider.

5.2.3.5 The website for the municipality is developed, but it must now be maintained to ensure that it reaches the envisaged benefits.

5.2.3.6 The library services play an important educational role in the community. Although the library can benefit from the Library development fund, there is currently not activity plan developed.

5.3 INSTITUTIONAL DEVELOPMENT AND TRANSFORMATION

Strategic Objective	Improve Organisational Cohesion and Effectiveness
Intended Outcome	Improved organisational stability and sustainability

5.3.1 IT

The Municipality has a central server and all users can access the information on the server. There is however rights allocated to specific drivers which cannot be accessed by all users.

The Municipality is making use of an external Service Provider to do the necessary back-ups of information, as well as to do basic maintenance of the server and the computers. The Service Provider is visiting the Municipality on a regular basis to perform this function.

There is a structured plan for the purchasing of new hard and/or software. If the need arise for more computers or specific programmes, the staff member will report it to his/her Section Manager or Supervisor, from there to the Acting CFO – Mr Shahien Hassen which in turn will discuss it with the Municipal Manager and he will evaluate the request. Each year there is a budget for "Furniture and Equipment" and the Municipal Manager makes use of this allocation to authorise and purchase computers and/or programmes.

There are a Nashua, Internet Services and Gestetner Stores in Prieska. These 3 suppliers are used to purchase the day-to-day consumables such as paper, cartridges, etc.

5.3.2 AVAILABILITY OF SKILLED STAFF

In general, the Northern Cape Province is struggling to attract skilled people to the Province, as well as to retain them. This Brain Drain situation is present in this Municipality as well. The recruitment and appointment process attempts to appoint local inhabitants of Siyathemba, first and foremost. However, a process exist to identify scarce skills, i.e. Electricians, Engineers, etc. and therefore recruitment happen on a wider[16] scale.

The qualifications of the Senior Managers in the Municipality are indicated in the table below[17]:

Municipal manager	Acting Financial Manager	Corporate services manager	Technical service manager	IDP / LED manager
Degree – Baccalaureus Educationist Honorius	B.Com	Vacant	B.Com	N6 Engineering

16 Annual Report 2010/11

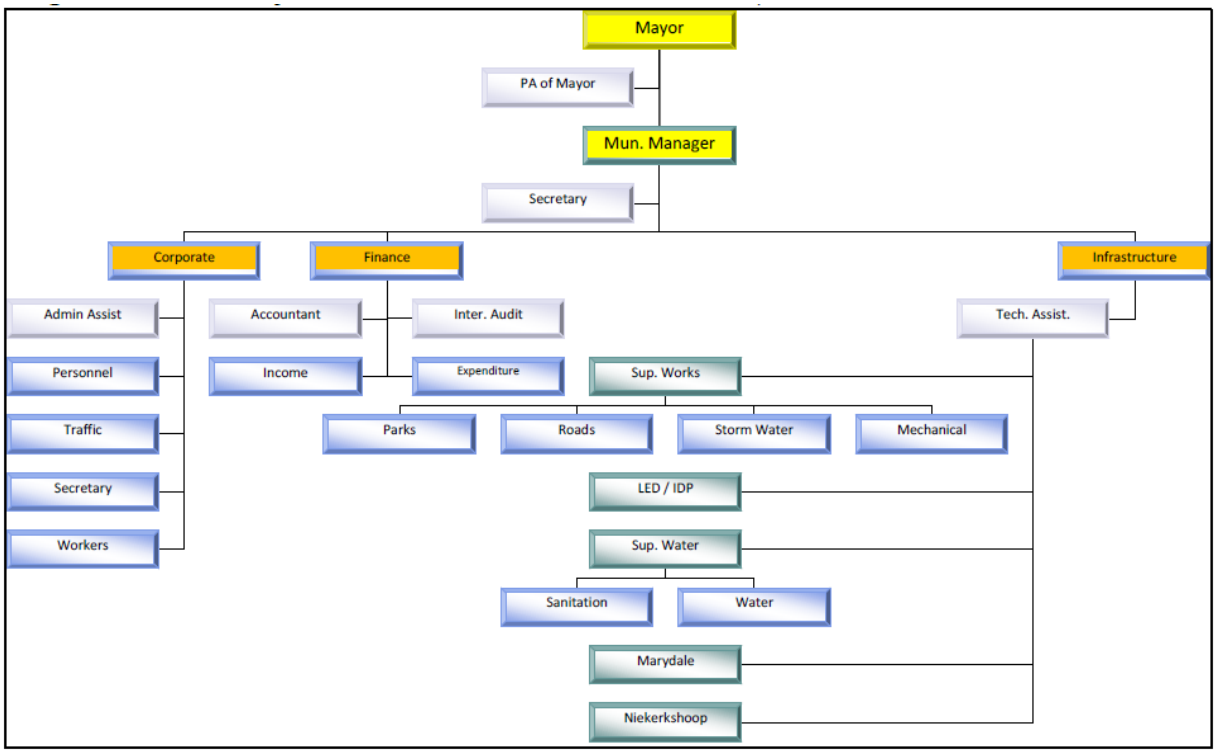
17 Section 47 Assessment report 2008/09, CoGHSTA, December 2010

5.3.3 ORGANISATIONAL STRUCTURE

For the delivery of services, the administration of the Municipality is divided into 3 Departments:

- Corporate Services
- Finances
- Infrastructure

Figure 6: Organogram[18]



This Structure and Organogram were approved by the Council in December 2013. Job descriptions are available for all these positions. The Municipality is however in the process to review their Organogram and to make the necessary changes to improve internal operations, as well as service delivery. The Municipal Manager indicated that they have progressed very well, involved Council and other stakeholders and finalised the Organisational Structure in December 2013. The municipality was assisted and guided by UTD Consulting Company.

The status quo in terms of the Municipal Structure and positions are indicated in the paragraphs below. The information is sourced from the Section 78 Investigation which was done during August 2011. In December 2013 the Organogram of the Municipality indicated 34 different positions[19].

18 IDP 2011/12

19 Section 78(1) Assessment report, August 2011

The staff component is summarized in the table below:

Table 20: Staff component

Sub Division	Total number of staff	Filled positions	Number of vacancies
Water	20	18	2
Electricity	6	5	1
Sewerage	28	26	2
Refuse	21	19	2
Parks	17	16	1
Public Works	32	33	0
Library	2	1	1
Co-operate Services	13	11	2
HR Officer	1	1	0
Treasury including interns	22	22	0
PA Mayor	1	1	0
Traffic Department	6	6	0
Data Clerk	1	1	0
TOTAL	170	159	11

Since a number of positions are vacant, the Municipality makes use of several contract positions, especially in the Technical Department. These positions are indicated in the table below:

Table 21: Contract Positions

Place	Number
Niekerkshoop	2
Prieska	9
Water	0
Sanitation	0
Parks	0
Refuse	0
Electricity	5
Marydale	2

For the 2011/12 financial year, approximately 30% of the positions were vacant.

During late 2011/12 financial year, the Municipality succeeded in filling a number of the vacant posts. Currently, the following posts are still vacant:

- Corporate Division: Corporate Manager; Driver / Messenger; MM-Secretary. See Organogram.

- Financial Division: See Organogram.
- Technical/Infrastructure: Superintendent Water and Wastewater and Electric Assistant Worker. See Organogram.

The Municipality has not yet finalised the process to compile job descriptions for all the new posts that are indicated in the draft Organogram.

5.3.4 PLANS AND STRATEGIES

Information with regards to related Plans and Strategies can be summarised as follows:

Plan/Strategy	Status
Skills Development Plan	The Plan is in place.
Human Resource Management Strategy	Strategy not yet developed.
Performance Management System	An external Service Provider assisted the Municipality during 2011 to develop a PMS. The Municipality must therefore start to implement the System as from the 2012/13 financial year. Currently, there are Performance Management Contracts in place. Key Performance Indicators need to be identified and linked with the SDBIP. The Municipality further aims to start implementing the Scorecard System as from the 2012/13 financial year.

5.3.5 CHALLENGES

1. The Municipality does not have an Integrated Human Resource Strategy in place to address all issues with regards to people already on the organogram of the Municipality as well as to retain employees and attract skilled people.
2. The current organogram of the municipality are structured in such a way that it promotes and accommodates all the functions of developmental government. The Council approve the revised Organogram in December 2013 and the implementation there-off is for the Senior Management's discretion. The Municipal Manager is Head of Administration.
3. The municipality developed a Performance management system, but this system is not yet rolled out in the municipality and not implemented.
4. The Municipality experiences challenges with regards to debt collection.
5. Although the Municipality does have a Skills development plan in place, the improvement of skills within the Municipality remains a challenge.
6. The Municipality does have a Functional Labour Forum in place.

5.4 FINANCIAL VIABILITY

Strategic Objective	To improve overall financial management in the Municipality by developing and implementing appropriate Financial Management Policies, Procedures and Systems
Intended Outcome	Improved Financial Management and Accountability

Financial viability is critical for ensuring the sustainability of municipal services. In Siyathemba, the financial viability of the Municipality needs to be improved. According to the Municipality, their economic situation and cash flow are under pressure, and this is largely due to the low payment culture. Audit opinions tracked over time indicate that the Municipality is NOT improving its Audit Outcomes: From 2006/2007 to 2013/2014 Siyathemba Local Municipality received a Disclaimer.[20]

The Mayor also indicated the following in the Annual Report 2010/11:

> "Our financial position is influenced by a flaccid debt collection rate and grant dependency from Provincial and National Government. At our Strategic Planning Session, we adopt the approach to turn our audit outcome (disclaimer) for the past years into an opportunity and is in process to be address by capacity building in the form of staff appointments and training, implementation of a strong Supply Chain Management unit, budget control measures, and creditors ordering system and timely payment of creditors and improved debt collection. Our cash flow situation is addressed by means of improved debt collection and ways to increase our income streams."

5.4.1 FINANCIAL VIABLILITY STATEMENTS

5.4.1.1 Statement of the Financial Position at 30 June 2013

The overall operating results for the year ending 30 June 2013, as well as the comparison with the budgeted figures and the actual results of 2012 are reflected in the following Table:

5.4.1.1.1 OPERATING REVENUE FRAMEWORK

For Siyathemba Municipality to continue improving the quality of services provided to its citizens it needs to generate the required revenue. In these tough economic times strong revenue management is fundamental to the financial sustainability of every municipality. The reality is that we are faced with huge development backlogs and high levels of poverty. The expenditure required to address these challenges will inevitably always exceed available funding; hence difficult choices have to be made in relation to tariff increases and balancing expenditures against realistically anticipated revenues.

20 Online available from http://www.agsa.co.za/AboutUs/TheAuditorGeneral.aspx

The municipality's revenue strategy is built around the following key components:

- National Treasury's guidelines and macroeconomic policy;
- Growth in the Municipality and continued economic development;
- Efficient revenue management, which aims to ensure a 70% annual collection rate for property rates and other key service charges;
- Electricity tariff increases as approved by the National Electricity Regulator of South Africa (NERSA);
- Achievement of full cost recovery of specific user charges especially in relation to trading services;
- Determining the tariff escalation rate by establishing/calculating the revenue requirement of each service;
- The municipality's Property Rates Policy approved in terms of the Municipal Property Rates Act, 2004 (Act 6 of 2004) (MPRA);
- Increase ability to extend new services and recover costs;
- The municipality's Indigent Policy and rendering of free basic services; and
- Tariff policies of the Municipality.

The following table is a summary of the 2014/15 MTREF (classified by main revenue source):

Table 22 Summary of revenue classified by main revenue source

NC077 Siyathemba - Table A2 Budgeted Financial Performance (revenue and expenditure by standard classification)

Standard Classification Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Revenue - Standard									
Governance and administration	**15 467**	**14 016**	**21 639**	**24 827**	**24 066**	**24 066**	**27 038**	**28 851**	**30 718**
Executive and council	745	1 466	721	766	705	705	673	713	752
Budget and treasury office	14 722	12 550	19 658	23 319	22 555	22 555	25 417	27 150	28 898
Corporate services	–	–	1 260	743	806	806	948	988	1 069
Community and public safety	**508**	**601**	**520**	**809**	**891**	**891**	**820**	**868**	**916**
Community and social services	457	601	478	749	831	831	754	798	842
Sport and recreation	–	–	–	–	–	–	–	–	–
Public safety	12	–	–	–	–	–	–	–	–
Housing	38	–	41	60	60	60	66	70	74
Health	–	–	–	–	–	–	–	–	–
Economic and environmental services	**18 244**	**18 946**	**14 404**	**22 580**	**29 358**	**29 358**	**11 167**	**11 424**	**11 913**
Planning and development	18 244	16 053	–	–	–	–	–	–	–
Road transport	–	2 894	14 404	22 580	29 358	29 358	11 167	11 424	11 913
Environmental protection	–	–	–	–	–	–	–	–	–
Trading services	**22 481**	**29 221**	**41 146**	**43 480**	**42 275**	**42 275**	**52 050**	**55 229**	**58 363**
Electricity	7 399	8 969	14 946	24 166	23 276	23 276	31 966	33 852	35 713
Water	6 596	10 305	18 066	8 924	9 008	9 008	9 304	9 853	10 395
Waste water management	8 485	–	5 414	7 588	7 599	7 599	8 230	8 737	9 228
Waste management	–	9 947	2 721	2 802	2 392	2 392	2 550	2 788	3 026
Other	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total Revenue - Standard	**56 700**	**62 785**	**77 709**	**91 696**	**96 590**	**96 590**	**91 075**	**96 372**	**101 910**
Expenditure - Standard									
Governance and administration	**27 837**	**26 754**	**29 307**	**43 246**	**36 431**	**36 431**	**37 162**	**39 341**	**41 686**
Executive and council	8 283	10 360	11 669	15 611	6 620	6 620	8 242	8 818	9 185
Budget and treasury office	19 554	16 394	13 368	27 423	23 690	23 690	22 934	24 196	25 678
Corporate services	–	–	4 270	212	6 121	6 121	5 986	6 326	6 824
Community and public safety	**2 228**	**2 175**	**3 015**	**3 790**	**3 942**	**3 942**	**4 226**	**4 445**	**4 676**
Community and social services	444	865	920	1 257	1 290	1 290	1 404	1 444	1 484
Sport and recreation	764	1 298	2 082	2 507	2 646	2 646	2 815	2 994	3 185
Public safety	1 019	12	13	26	6	6	7	7	7
Housing	–	–	–	–	–	–	–	–	–
Health	–	–	–	–	–	–	–	–	–
Economic and environmental services	**4 593**	**9 134**	**8 633**	**12 471**	**9 954**	**9 954**	**11 291**	**11 863**	**12 590**
Planning and development	4 593	6 732	–	–	–	–	–	–	–
Road transport	–	2 401	8 613	12 471	9 934	9 934	11 271	11 843	12 570
Environmental protection	–	–	21	–	20	20	20	20	20
Trading services	**23 670**	**25 801**	**24 321**	**36 789**	**37 003**	**37 003**	**34 877**	**37 091**	**38 838**
Electricity	13 816	11 819	13 307	20 455	20 107	20 107	17 088	18 080	19 114
Water	4 482	4 489	4 201	5 557	5 983	5 983	6 216	6 699	6 627
Waste water management	5 372	–	3 628	4 869	5 083	5 083	5 235	5 569	5 925
Waste management	–	9 493	3 185	5 909	5 829	5 829	6 338	6 743	7 171
Other	**–**	**13**	**4**	**10**	**5**	**5**	**10**	**10**	**11**
Total Expenditure - Standard	**58 328**	**63 877**	**65 280**	**96 307**	**87 335**	**87 335**	**87 566**	**92 750**	**97 801**
Surplus/(Deficit) for the year	**(1 629)**	**(1 093)**	**12 429**	**(4 611)**	**9 256**	**9 256**	**3 509**	**3 622**	**4 110**

Table 23 Percentage growth in revenue by main revenue source

NC077 Siyathemba - Table A3 Budgeted Financial Performance (revenue and expenditure by municipal vote)

Vote Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Revenue by Vote									
Vote 1 - EXECUTIVE AND COUNCIL	–	–	721	635	705	705	673	713	752
Vote 2 - BUDGET & TREASURY OFFICE	–	–	19 658	23 349	22 555	22 555	25 417	27 150	28 898
Vote 3 - CORPORATE SERVICES	–	–	2 754	2 811	2 730	2 730	3 200	3 549	3 938
Vote 4 - TECHNICAL & ENGINEERING SERVICES	–	–	54 576	66 108	70 600	70 600	61 786	64 961	68 323
Vote 5 -	–	–	–	–	–	–	–	–	–
Vote 6 - [NAME OF VOTE 6]	–	–	–	–	–	–	–	–	–
Vote 7 - [NAME OF VOTE 7]	–	–	–	–	–	–	–	–	–
Vote 8 - [NAME OF VOTE 8]	–	–	–	–	–	–	–	–	–
Vote 9 - [NAME OF VOTE 9]	–	–	–	–	–	–	–	–	–
Vote 10 - [NAME OF VOTE 10]	–	–	–	–	–	–	–	–	–
Vote 11 - [NAME OF VOTE 11]	–	–	–	–	–	–	–	–	–
Vote 12 - [NAME OF VOTE 12]	–	–	–	–	–	–	–	–	–
Vote 13 - [NAME OF VOTE 13]	–	–	–	–	–	–	–	–	–
Vote 14 - [NAME OF VOTE 14]	–	–	–	–	–	–	–	–	–
Vote 15 - [NAME OF VOTE 15]	–	–	–	–	–	–	–	–	–
Total Revenue by Vote	**–**	**–**	**77 709**	**92 902**	**96 590**	**96 590**	**91 075**	**96 372**	**101 910**
Expenditure by Vote *to be appropriated*									
Vote 1 - EXECUTIVE AND COUNCIL	–	–	11 669	7 813	6 620	6 620	8 242	8 818	9 185
Vote 2 - BUDGET & TREASURY OFFICE	–	–	13 368	27 453	23 690	23 690	22 934	24 196	25 678
Vote 3 - CORPORATE SERVICES	–	–	6 638	11 732	9 097	9 097	9 396	9 890	10 562
Vote 4 - TECHNICAL & ENGINEERING SERVICES	–	–	33 605	58 519	47 928	47 928	46 995	49 845	52 377
Vote 5 -	–	–	–	–	–	–	–	–	–
Vote 6 - [NAME OF VOTE 6]	–	–	–	–	–	–	–	–	–
Vote 7 - [NAME OF VOTE 7]	–	–	–	–	–	–	–	–	–
Vote 8 - [NAME OF VOTE 8]	–	–	–	–	–	–	–	–	–
Vote 9 - [NAME OF VOTE 9]	–	–	–	–	–	–	–	–	–
Vote 10 - [NAME OF VOTE 10]	–	–	–	–	–	–	–	–	–
Vote 11 - [NAME OF VOTE 11]	–	–	–	–	–	–	–	–	–
Vote 12 - [NAME OF VOTE 12]	–	–	–	–	–	–	–	–	–
Vote 13 - [NAME OF VOTE 13]	–	–	–	–	–	–	–	–	–
Vote 14 - [NAME OF VOTE 14]	–	–	–	–	–	–	–	–	–
Vote 15 - [NAME OF VOTE 15]	–	–	–	–	–	–	–	–	–
Total Expenditure by Vote	**–**	**–**	**65 280**	**105 516**	**87 335**	**87 335**	**87 566**	**92 750**	**97 801**
Surplus/(Deficit) for the year	**–**	**–**	**12 429**	**(12 613)**	**9 256**	**9 256**	**3 509**	**3 622**	**4 110**

In line with the formats prescribed by the Municipal Budget and Reporting Regulations, capital transfers and contributions are excluded from the operating statement, as inclusion of these revenue sources would distort the calculation of the operating surplus/deficit.

Revenue generated from rates and services charges forms a significant percentage of the revenue basket for the Municipality. Rates and service charge revenues comprise more than half of the total revenue mix. In the 2014/15 financial year, revenue from rates and services charges will total R44.3million. This increases to R47.1million, R49.8million in the respective financial years of the MTREF. The above table includes revenue foregone arising from discounts and rebates associated with the tariff policies of the Municipality. Details in this regard are contained in Table 44 MBRR SA1 (see page 93).

Refuse is the smallest revenue source from services totalling R2.7million rand and increases to R3million by 2015/16. The smallest source is 'other revenue' which consists of various items such as income received from permits and licenses, building plan fees, connection fees, transport fees and advertisement fees. Departments have been urged to review the tariffs of these items on an annual basis to ensure they are cost reflective and market related.

Operating grants and transfers totals R22.4million in the 2014/15 financial year and steadily increases to R25.0million by 2016/17.

The following table gives a breakdown of the various operating grants and subsidies allocated to the municipality over the medium term:

Table 24 Operating Transfers and Grant Receipts

NC077 Siyathemba - Supporting Table SA18 Transfers and grant receipts

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
RECEIPTS:									
Operating Transfers and Grants									
National Government:	–	–	–	**27 046**	**27 046**	**27 046**	**26 706**	**27 566**	**28 049**
Local Government Equitable Share				21 171	21 171	21 171	22 472	24 149	24 931
Finance Management				1 650	1 650	1 650	1 800	1 950	2 100
Municipal Systems Improvement				890	890	890	934	967	1 018
Integrated National Electrification Programme				2 335	2 335	2 335	500	500	–
EPWP Incentive				1 000	1 000	1 000	1 000		
Other transfers/grants [insert description]									
Provincial Government:	–	–	–	**695**	**695**	**695**	**695**	**695**	**695**
Sport and Recreation				695	695	695	695	695	695
Other transfers/grants [insert description]									
District Municipality:	–	–	–	–	–	–	–	–	–
[insert description]									
Other grant providers:	–	–	–	–	–	–	–	–	–
[insert description]									
Total Operating Transfers and Grants	–	–	–	**27 741**	**27 741**	**27 741**	**27 401**	**28 261**	**28 744**
Capital Transfers and Grants									
National Government:	–	–	–	**18 300**	**18 300**	**18 300**	**11 708**	**9 702**	**9 929**
Municipal Infrastructure Grant (MIG)				11 800	11 800	11 800	9 708	9 702	9 929
Regional Bulk Infrastructure				6 500	6 500	6 500	2 000		
Other capital transfers/grants [insert desc]									
Provincial Government:	–	–	–	–	–	–	–	–	–
Other capital transfers/grants [insert description]									
District Municipality:	–	–	–	–	–	–	–	–	–
[insert description]									
Other grant providers:	–	–	–	–	–	–	–	–	–
[insert description]									
Total Capital Transfers and Grants	–	–	–	**18 300**	**18 300**	**18 300**	**11 708**	**9 702**	**9 929**
TOTAL RECEIPTS OF TRANSFERS & GRANTS	–	–	–	**46 041**	**46 041**	**46 041**	**39 109**	**37 963**	**38 673**

Tariff-setting is a pivotal and strategic part of the compilation of any budget. When rates, tariffs and other charges were revised, local economic conditions, input costs and the affordability of services were taken into account to ensure the financial sustainability of the Municipality.

National Treasury continues to encourage municipalities to keep increases in rates, tariffs and other charges as low as possible. Municipalities must justify in their budget documentation all increases in excess of the 6 per cent upper boundary of the South African Reserve Bank's inflation target. Excessive increases are likely to be counterproductive, resulting in higher levels of non-payment.

The percentage increases of Eskom bulk tariffs are far beyond the mentioned inflation target. Given that these tariff increases are determined by external agencies, the impact they have on the municipality's electricity and in these tariffs are largely outside the control of the Municipality. Discounting the impact of these price increases in lower consumer tariffs will erode the Municipality's future financial position and viability.

It must also be appreciated that the consumer price index, as measured by CPI, is not a good measure of the cost increases of goods and services relevant to municipalities. The basket of goods and services utilised for the calculation of the CPI consist of items such as food, petrol and medical services, whereas the cost drivers of a municipality are informed by items such as the cost of remuneration, bulk purchases of electricity and water, petrol, diesel, chemicals, cement etc. The current challenge facing the Municipality is managing the gap between cost drivers and tariffs levied, as any shortfall must be made up by either operational efficiency gains or service level reductions. Within this framework the Municipality has undertaken the tariff setting process relating to service charges as follows.

5.4.2 PROPERTY RATES

Property rates cover the cost of the provision of general services. Determining the effective property rate tariff is therefore an integral part of the municipality's budgeting process.

National Treasury's MFMA Circular No. 51 deals, inter alia with the implementation of the Municipal Property Rates Act, with the regulations issued by the Department of Co-operative Governance. These regulations came into effect on 1 July 2009 and prescribe the rate ratio for the non-residential categories, public service infrastructure and agricultural properties relative to residential properties to be 0, 25:1. The implementation of these regulations was done in the previous budget process and the Property Rates Policy of the Municipality has been amended accordingly.

The following stipulations in the Property Rates Policy are highlighted:

- The first R15 000 of the market value of a property used for residential purposes is excluded from the rate-able value (Section 17(h) of the MPRA). In addition to this rebate, a further R25 000 reduction on the market value of a property will be granted in terms of the Municipality's own Property Rates Policy;
- 25 per cent rebate will be granted on all state owned properties
- 100 per cent rebate will be granted to registered indigents in terms of the Indigent Policy;
- For pensioners, physically and mentally disabled persons, a maximum/total rebate of 50 per cent (calculated on a sliding scale) will be granted to owners of rate-able property if the total

gross income of the applicant and/or his/her spouse, if any, does not to exceed the amount equal to twice the annual state pension as approved by the National Government for a financial year. In this regard the following stipulations are relevant:

- The rate-able property concerned must be occupied only by the applicant and his/her spouse, if any, and by dependants without income;
- The applicant must submit proof of his/her age and identity and, in the case of a physically or mentally handicapped person, proof of certification by a Medical Officer of Health, also proof of the annual income from a social pension;
- The applicant's account must be paid in full, or if not, an arrangement to pay the debt should be in place; and
- The property must be categorized as residential.

- The Municipality may award a 100 per cent grant-in-aid on the assessment rates of rate-able properties of certain classes such as registered welfare organizations, institutions or organizations performing charitable work, sports grounds used for purposes of amateur sport. The owner of such a property must apply to the Chief Financial Officer in the prescribed format for such a grant.

The categories of rate-able properties for purposes of levying rates and the proposed rates for the 2014/15 financial year based on a 6.2 per cent increase from 1 July 2014 is contained below:

Table 25 Comparison of proposed rates to be levied for the 2014/2015 financial

Category	Current Tariff (1 July 2013)	Proposed tariff (from 1 July 2014)
	C	C
Residential properties	0.01882855	0.0199959578
State owned properties	0.03766000	0.3999492
Business & Commercial	0.0244800	0.02599776
Agricultural	0.0002627500	0.00027904

5.4.3 SALE OF WATER AND IMPACT OF TARIFF INCREASES

South Africa faces similar challenges with regard to water supply as it did with electricity, since demand growth outstrips supply. Consequently, National Treasury is encouraging all municipalities to carefully review the level and structure of their water tariffs to ensure:

- Water tariffs are fully cost-reflective – including the cost of maintenance and renewal of purification plants, water networks and the cost associated with reticulation expansion;
- Water tariffs are structured to protect basic levels of service and ensure the provision of free water to the poorest of the poor (indigent); and
- Water tariffs are designed to encourage efficient and sustainable consumption.

In addition National Treasury has urged all municipalities to ensure that water tariff structures are cost reflective by 2014.

Better maintenance of infrastructure, new dam construction and cost-reflective tariffs will ensure that the supply challenges are managed in future to ensure sustainability.

A tariff increase of 10 per cent from 1 July 2012 for water is proposed. This is based on input cost of inputs increasing by 10 per cent.

A summary of the proposed tariffs for households (residential) and non-residential are as follows:

Table 26 Proposed Water Tariffs

CATEGORY	CURRENT TARIFFS 2013/14	PROPOSED TARIFFS 2014/15
	Rand per kℓ	Rand per kℓ
RESIDENTIAL		
(i) 0 to 6 kℓ	4.7	4.5
(ii) 7 to 12 kℓ	5.2	5.0
(iii) 13 to 50 kℓ	5.8	5.6
(iv) 51 to 150 kℓ	6.7	6.5
(iv) +150 kℓ	8.0	7.8

The tariff structure of the 2014/15 financial year has been changed. The tariff structure is designed to charge higher levels of consumption a higher rate, steadily increasing as consumption increases.

5.4.4 SALE OF ELECTRICITY AND IMPACT OF TARIFF INCREASES

NERSA has announced the revised bulk electricity pricing structure. A 7.39 per cent increase in the Eskom bulk electricity tariff to municipalities will be effective from 1 July 2013.

Registered indigents will again be granted 50 kWh per 30-day period free of charge
The following table shows the impact of the proposed increases in electricity tariffs on the electricity charges for domestic customers:

Table 27 Comparison between current electricity charges and increases (Domestic)

BESKRYWING	2014/2015 BTW INGESLUIT	2014/2015 Tarief	% Verhoging	2013/2014 BTW INGESLUIT	2013/2014 Tarief
B1) KLEINKRAGVERBRUIK (<1000kwh p/m)					
Besighede waarvan die gemiddelde maandelikse					
vebruik vir die voorafgaande 12 maande minder was as 1000kwh					
(1 Julie -30Junie)					
a) Energieheffing	1.19	1.0	7.39	1.11	1.0
b) Basiesheffing	960.76	842.8	7.39	894.65	784.8
B2) KLEINKRAGVERBRUIK(>1000 kwh p/m)					
Besighede waarvan die gemiddelde maandelikse					
verbruik vir die voorafgaande 12 maande meer was as 1000kwh					
(1 Julie - 30 Junie)					
a) Energieheffing	1.19	1.0	7.39	1.11	1.0
b) Basiesheffing	1 168.15	1 024.7	7.39	1 087.77	954.2
C) HUISHOUDELIK					
Vir huishoudelike toevoere waar konvensionele					
meettoerusting gebruik word :					
a) Energieheffing c/kwh	1.25	1.1	7.39	1.16	1.0
b) Basiesheffing per maand	378.83	332.3	7.39	352.76	309.4
D) VOORAFBETAALD					
Van toepassing vir enkelfase-toevoere waar 'n					
voorafbetaalde metingstelsel gebruik word:					
a) Energieheffing c/kwh	1.54	1.3519	7.3900	1.4351	1.2589
b) Basiesheffing per maand					

It should further be noted that NERSA has approved that a inclining block tariff structure at 7.39 per cent needs to be implemented from 1 July 2014. The effect thereof will be that the higher the consumption, the higher the cost per kWh. The aim is to subsidise the lower consumption users (mostly the poor). The Municipality has entered into discussions with NERSA regarding the suitability of the NERSA proposed inclining block tariffs compared to those already being implemented by the Municipality already.

The inadequate electricity bulk capacity and the impact on service delivery and development remains a challenge for the Municipality. Most of the suburbs and inner Municipality reticulation network was designed or strengthened in the early 1980's with an expected 20-25 year life-expectancy. The upgrading of the Municipality's electricity network has therefore become a strategic priority, especially the substations and transmission lines.

Owing to the high increases in Eskom's bulk tariffs, it is clearly not possible to fund these necessary upgrades through increases in the municipal electricity tariff – as the resultant tariff increases would be unaffordable for the consumers. It is therefore proposed that the taking up of loans as a strategy for funding of the infrastructure be considered and approved to spread the burden over the life span of the assets. As part of the 2013/14 medium-term capital programme, funding has been allocated to electricity infrastructure but these funding levels will require further investigation as part of the next budget cycle in an attempt to source more funding to ensure this risk is mitigated.

5.4.5 SANITATION AND IMPACT OF TARIFF INCREASES

A tariff increase of 9.9 per cent for sanitation from 1 July 2014 is proposed. This is based on the input cost assumptions related to water. It should be noted that electricity costs contributes approximately 20 per cent of waste water treatment input costs, therefore the higher than CPI increase of 9.9 per cent for sanitation tariffs. The following factors also contribute to the proposed tariff increase:

- Sanitation charges are calculated according to the type of consumer and the level of service provided as indicated in the table below;
- Free sanitation will be applicable to registered indigents; and
  The total revenue expected to be generated from rendering this service amounts to R 2.7 million for the 2013/14 financial year.

The following table compares the current and proposed tariffs:

Table 28 Comparison between current sanitation charges and increases

BESKRYWING	*2014/2015*	*2014/2015*	*% Verhoging*	*2013/2014*	2013/2014
	BTW INGESLUIT	*Tarief*		*BTW INGESLUIT*	Tarief
Riooltarief					
Beboude woonerwe	199.4	174.9	10.0	181.3	159.0
Kerke,kerksale,Sport en welsyn	133.0	116.6	10.0	120.9	106.0
Besighede	314.0	275.4	10.0	285.4	250.4
Besighede -Ekstra potte	93.7	82.2	10.0	85.2	74.7
Onbeboude staatserwe	1 057.1	927.3	10.0	961.0	843.0
Kontrakteurs	660.0	578.9	10.0	600.0	526.3
Beskikbaarheidsgelde					
Beskikbaarheid	146.3	128.3	10.0	133.0	116.6
Eerste gerief(1 pot)	314.0	275.4	10.0	285.4	250.4
Plus per pot vir twee of meer potte	93.7	82.2	10.0	85.2	74.7
Munisipale verbruik	132.9	116.6	10.0	120.8	106.0

5.4.6 WASTE REMOVAL AND IMPACT OF TARIFF INCREASES

Currently solid waste removal is operating at a small surplus. The main contributors to expenditure are repairs and maintenance on vehicles, increases in general expenditure such as petrol and diesel and the cost of remuneration.

A 9.9 per cent increase in the waste removal tariff is proposed from 1 July 2014. Higher increases will not be viable in 2014/15 owing to the significant increases implemented in previous financial years as well as the overall impact of higher than inflation increases of other services. Any increase higher than 10 per cent would be counter-productive and will result in affordability challenges for individual rates payers raising the risk associated with bad debt.

The following table compares current and proposed amounts payable from 1 July 2014:

Table 29 Comparison between current waste removal fees and increases

BESKRYWING	2014/2015	2014/2015	% Verhoging	2013/2014	2013/2014
	BTW INGESLUIT	Tarief		BTW INGESLUIT	Tarief
Vullis					
Per standaard Drom per maand					
Prieska	80.0	70.1	27.5	62.7	55.0
Marydale	80.0	70.1	27.5	62.7	55.0
Niekerkshoop	80.0	70.1	27.5	62.7	55.0

5.4.7 OVERALL IMPACT OF TARIFF INCREASES ON HOUSEHOLDS

The following table shows the overall expected impact of the tariff increases on a large and small household, as well as an indigent household receiving free basic services.

Note that in all instances the overall impact of the tariff increases on household's bills has been kept to a maximum percentage of 10%.

NC077 Siyathemba - Supporting Table SA14 Household bills

Description	Ref	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework			
Rand/cent		Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15 % incr.	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Monthly Account for Household - 'Middle Income Range'	1										
Rates and services charges:											
Property rates		590.49	627.10	661.96	661.96	661.96	661.96	6.2%	703.01	741.67	781.72
Electricity: Basic levy		246.66	296.93	329.68	356.05	356.05	356.05	6.2%	378.13	398.92	420.47
Electricity: Consumption		434.29	522.80	580.46	626.90	626.90	626.90	7.4%	673.23	710.26	748.61
Water: Basic levy		206.55	222.46	255.82	276.29	276.29	276.29	9.9%	303.64	320.34	337.64
Water: Consumption		362.64	390.56	449.15	485.08	485.08	485.08	9.9%	533.10	562.42	592.80
Sanitation		133.29	143.35	164.85	178.04	178.04	178.04	9.9%	195.66	206.43	217.57
Refuse removal		48.43	52.16	59.99	64.79	64.79	64.79	9.9%	71.20	75.11	79.17
Other											
sub-total		2,022.35	2,255.35	2,501.92	2,649.11	2,649.11	2,649.11	7.9%	2,857.97	3,015.16	3,177.98
VAT on Services											
Total large household bill:		2,022.35	2,255.35	2,501.92	2,649.11	2,649.11	2,649.11	7.9%	2,857.97	3,015.16	3,177.98
% increase/-decrease			11.5%	10.9%	5.9%	–	–		7.9%	5.5%	5.4%
Monthly Account for Household - 'Affordable Range'	2										
Rates and services charges:											
Property rates		272.71	289.62	305.72	330.18	330.18	330.18	6.2%	350.65	369.93	389.91
Electricity: Basic levy		246.66	296.93	329.68	362.65	362.65	362.65	6.2%	385.13	406.31	428.25
Electricity: Consumption		191.99	231.12	256.61	282.27	282.27	282.27	7.4%	303.13	319.81	337.07
Water: Basic levy		44.39	47.80	54.97	60.47	60.47	60.47	9.9%	66.46	70.11	73.90
Water: Consumption		33.98	36.59	42.08	46.29	46.29	46.29	9.9%	50.87	53.67	56.57
Sanitation		133.23	143.29	164.78	181.26	181.26	181.26	9.9%	199.21	210.16	221.51
Refuse removal		48.43	52.16	59.99	65.98	65.98	65.98	9.9%	72.52	76.51	80.64
Other											
sub-total		971.38	1,097.51	1,213.83	1,329.10	1,329.10	1,329.10	7.4%	1,427.96	1,506.50	1,587.85
VAT on Services											
Total small household bill:		971.38	1,097.51	1,213.83	1,329.10	1,329.10	1,329.10	7.4%	1,427.96	1,506.50	1,587.85
% increase/-decrease			13.0%	10.6%	9.5%	–	–		7.4%	5.5%	5.4%
Monthly Account for Household - 'Indigent' Household receiving free basic services	3										
Rates and services charges:											
Property rates		34.35	36.48	38.50	41.58	41.58	41.58	6.2%	44.16	46.59	49.11
Electricity: Basic levy		–	–	–	–	–	–	6.2%	–	–	–
Electricity: Consumption		–	–	–	–	–	–	7.4%	–	–	–
Water: Basic levy		60.66	65.33	75.13	82.64	82.64	82.64	9.9%	90.83	95.82	101.00
Water: Consumption		80.74	86.96	100.00	110.00	110.00	110.00	9.9%	120.89	127.54	134.43
Sanitation		45.69	49.14	56.51	62.16	62.16	62.16	9.9%	68.32	72.07	75.96
Refuse removal		–	–	–	–	–	–	9.9%	–	–	–
Other											
sub-total		221.44	237.90	270.14	296.39	296.39	296.39	9.4%	324.19	342.02	360.49
VAT on Services											
Total small household bill:		221.44	237.90	270.14	296.39	296.39	296.39	9.4%	324.19	342.02	360.49
% increase/-decrease			7.4%	13.6%	9.7%	–	–		9.4%	5.5%	5.4%

5.5 OPERATING EXPENDITURE FRAMEWORK

The Municipality's expenditure framework for the 2014/15 budget and MTREF is informed by the following:

- The asset renewal strategy and the repairs and maintenance plan;
- Balanced budget constraint (operating expenditure should not exceed operating revenue) unless there are existing uncommitted cash-backed reserves to fund any deficit;
- Funding of the budget over the medium-term as informed by Section 18 and 19 of the MFMA;
- The capital programme is aligned to the asset renewal strategy and backlog eradication plan;
- Operational gains and efficiencies will be directed to funding the capital budget and other core services; and
- Strict adherence to the principle of *no project plans no budget*. If there is no business plan no funding allocation can be made.

The following table is a high level summary of the 2014/15 budget and MTREF (classified per main type of operating expenditure):

Table 30 Summary of operating expenditure by standard classification item

NC077 Siyathemba - Table A4 Budgeted Financial Performance (revenue and expenditure)

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Expenditure By Type									
Employee related costs	21 393	24 454	29 386	36 208	35 848	35 848	38 868	41 381	43 997
Remuneration of councillors	1 474	1 821	1 949	2 381	2 381	2 381	2 575	2 740	2 916
Debt impairment	5 161	3 067	6 322	3 165	3 165	3 165	3 194	3 542	3 647
Depreciation & asset impairment	9 305	9 182	–	10 588	10 588	10 588	11 105	11 547	12 286
Finance charges	939	1 070	1 034	757	767	767	792	792	843
Bulk purchases	6 498	9 446	11 262	17 684	17 684	17 684	14 189	15 203	16 053
Other materials	–	2 366	438						
Contracted services	–	–	3 617	7 843	3 875	3 875	2 075	2 140	2 201
Transfers and grants	101	6 185	–	7 229	–	–	–	–	–
Other expenditure	13 456	6 286	11 271	19 661	13 027	13 027	14 767	15 404	15 859
Loss on disposal of PPE									
Total Expenditure	**58 327**	**63 877**	**65 280**	**105 515**	**87 335**	**87 335**	**87 566**	**92 750**	**97 801**

The budgeted allocation for employee related costs for the 2014/15 financial year totals R38.8 million, which equals 34 per cent of the total operating expenditure. Based on the three year collective SALGBC agreement which expires at the end of the current financial year, salary increases have been factored into this budget at a percentage increase of 7 per cent for the 2014/15 financial year. An annual increase of 7 per cent has been included in the two outer years of the MTREF. As part of the Municipality's cost reprioritization and cash management strategy vacancies have been significantly rationalized downwards. As part of the planning assumptions and interventions all vacancies were originally removed from the budget and a report was compiled by the Corporate Services Department relating to the prioritization of critical vacancies within the Municipality. In addition expenditure against overtime was significantly reduced, with provisions against this budget item only being provided for other critical functions.

The fact that a settlement has not been reached by the SALGBC parties in the salary dispute resulted in an uncertainty on this area of expenditure. It should be noted that the total financial implication could not be determined as the applicable municipal wage curve (representing equal pay for equal work at all municipalities in South Africa) has not been finalised.

The cost associated with the remuneration of councillors is determined by the Minister of Co-operative Governance and Traditional Affairs in accordance with the Remuneration of Public Office Bearers Act, 1998 (Act 20 of 1998). The most recent proclamation in this regard has been taken into account in compiling the Municipality's budget.

The provision of debt impairment was determined based on an annual collection rate of 70 per cent. For the 2014/15 financial year this amount equates to R 3.1 million and escalates to R3.6million by 2016/17. While this expenditure is considered to be a non-cash flow item, it informed the total cost associated with rendering the services of the municipality, as well as the municipality's realistically anticipated revenues.

Provision for depreciation and asset impairment has been informed by the Municipality's Asset Management Policy. Depreciation is widely considered a proxy for the measurement of the rate asset consumption. Note that the implementation of GRAP 17 accounting standard has meant bringing a range of assets previously not included in the assets register onto the register. This has resulted in a significant increase in depreciation relative to previous years.

Bulk purchases are directly informed by the purchase of electricity from Eskom and water from DWAF. The annual price increases have been factored into the budget appropriations and directly inform the revenue provisions. The expenditures include distribution losses.

Other expenditure comprises of various line items relating to the daily operations of the municipality. This group of expenditure has also been identified as an area in which cost savings and efficiencies can be achieved. Growth has been limited indicating that significant cost savings have been already realised.

5.5.1 PRIORITY GIVEN TO REPAIRS AND MAINTENANCE

Aligned to the priority being given to preserving and maintaining the Municipality's current infrastructure, the 2014/15 budget and MTREF provide for extensive growth in the area of asset maintenance, as informed by the asset renewal strategy and repairs and maintenance plan of the Municipality. In terms of the Municipal Budget and Reporting Regulations, operational repairs and maintenance is not considered a direct expenditure driver but an outcome of certain other expenditures, such as remuneration, purchases of materials and contracted services.

During the compilation of the 2014/15 MTREF operational repairs and maintenance was identified as a strategic imperative owing to the aging of the Municipality's infrastructure and historic deferred maintenance. To this end, repairs and maintenance was substantially increased by from R9.4million to R10.1million. This strategic imperative remains a priority as can be seen by the budget appropriations over the MTREF.

The table below provides a breakdown of the repairs and maintenance in relation to asset class:

Table 31 Repairs and maintenance per asset class

NC077 Siyathemba - Supporting Table SA34c Repairs and maintenance expenditure by asset class

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Repairs and maintenance expenditure by Asset Class/Sub-class									
Infrastructure	–	–	–	–	–	–	–	–	–
Infrastructure - Road transport	–	–	–	–	–	–	–	–	–
Roads, Pavements & Bridges									
Storm water									
Infrastructure - Electricity	–	–	–	–	–	–	–	–	–
Generation									
Transmission & Reticulation									
Street Lighting									
Infrastructure - Water	–	–	–	–	–	–	–	–	–
Dams & Reservoirs									
Water purification									
Reticulation									
Infrastructure - Sanitation	–	–	–	–	–	–	–	–	–
Reticulation									
Sewerage purification									
Infrastructure - Other	–	–	–	–	–	–	–	–	–
Waste Management									
Transportation									
Gas									
Other									
Community	–	–	–	–	–	–	–	–	–
Parks & gardens									
Sportsfields & stadia									
Swimming pools									
Community halls									
Libraries									
Recreational facilities									
Fire, safety & emergency									
Security and policing									
Buses									
Clinics									
Museums & Art Galleries									
Cemeteries									
Social rental housing									
Other									
Heritage assets	–	–	–	–	–	–	–	–	–
Buildings									
Other									
Investment properties	–	–	–	–	–	–	–	–	–
Housing development									
Other									
Other assets	–	–	–	–	–	–	–	–	–
General vehicles									
Specialised vehicles	–	–	–	–	–	–	–	–	–
Plant & equipment									
Computers - hardware/equipment									
Furniture and other office equipment									
Abattoirs									
Markets									
Civic Land and Buildings									
Other Buildings									
Other Land									
Surplus Assets - (Investment or Inventory)									
Other									
Agricultural assets	–	–	–	–	–	–	–	–	–
List sub-class									
Biological assets	–	–	–	–	–	–	–	–	–
List sub-class									
Intangibles	–	–	–	–	–	–	–	–	–
Computers - software & programming									
Other *(list sub-class)*									
Total Repairs and Maintenance Expenditure	–	–	–	–	–	–	–	–	–
Specialised vehicles	–	–	–	–	–	–	–	–	–
Refuse									
Fire									
Conservancy									
Ambulances									
R&M as a % of PPE	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
R&M as % Operating Expenditure	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

5.5.2 FREE BASIC SERVICES: BASIC SOCIAL SERVICES PACKAGE

The social package assists households that are poor or face other circumstances that limit their ability to pay for services. To receive these free services the households are required to register in terms of the Municipality's Indigent Policy. The target is to register 2758 or more indigent households during the 2014/15 financial year, a process reviewed annually. Detail relating to free services, cost of free basic services, revenue lost owing to free basic services as well as basic service delivery measurement is contained in Table 27 MBRR A10 (Basic Service Delivery Measurement) on page 38.

The cost of the social package of the registered indigent households is largely financed by national government through the local government equitable share received in terms of the annual Division of Revenue Act.

5.6 CAPITAL EXPENDITURE

The following table provides a breakdown of budgeted capital expenditure by vote:

Table 32 2014/15 Medium-term capital budget per vote

NC077 Siyathemba - Supporting Table SA29 Budgeted monthly capital expenditure (standard classification)

Description	Ref	Budget Year 2014/15												Medium Term Revenue and Expenditure Framework		
R thousand		July	August	Sept.	October	Nov.	Dec.	January	Feb.	March	April	May	June	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Capital Expenditure - Standard	1															
Governance and administration		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Executive and council													-	-	-	-
Budget and treasury office													-	-	-	-
Corporate services													-	-	-	-
Community and public safety		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Community and social services													-	-	-	-
Sport and recreation													-	-	-	-
Public safety													-	-	-	-
Housing													-	-	-	-
Health													-	-	-	-
Economic and environmental services		417	417	417	417	417	417	417	417	417	417	417	417	5,000	6,000	6,500
Planning and development													-	-	-	-
Road transport		417	417	417	417	417	417	417	417	417	417	417	417	5,000	6,000	6,500
Environmental protection													-	-	-	-
Trading services		743	743	743	743	743	743	743	743	743	743	743	743	8,920	7,700	8,500
Electricity		77	77	77	77	77	77	77	77	77	77	77	77	920	1,200	1,500
Water		92	92	92	92	92	92	92	92	92	92	92	92	1,100	-	-
Waste water management		575	575	575	575	575	575	575	575	575	575	575	575	6,900	6,500	7,000
Waste management													-	-	-	-
Other													-	-	-	-
Total Capital Expenditure - Standard	2	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	13,920	13,700	15,000
Funded by:																
National Government		1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	13,920	13,700	15,000
Provincial Government													-	-	-	-
District Municipality													-	-	-	-
Other transfers and grants													-	-	-	-
Transfers recognised - capital		1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	13,920	13,700	15,000
Public contributions & donations													-	-	-	-
Borrowing													-	-	-	-
Internally generated funds													-	-	-	-
Total Capital Funding		1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	13,920	13,700	15,000

For 2014/15 an amount of R13.9 million has been appropriated for the development of infrastructure which represents 100 per cent of the total capital budget. In the outer years this amount totals R13.7 million, 100 per cent and R15 million, 100 per cent respectively for each of the financial years. Upgrading of streets receive the highest allocation of R6.9 million in 2014/15.

Total new assets represent 100 per cent or R13.9 million of the total capital budget. Further detail relating to asset classes and proposed capital expenditure is contained in Table 26 MBRR A9 (Asset Management) on page 36. In addition to the MBRR Table A9, MBRR Tables SA34a, b, c provides a detailed breakdown of the capital programme relating to new asset construction, capital asset renewal as well as operational repairs and maintenance by asset class (refer to pages 88, 89 and 90). Some of the salient projects to be undertaken over the medium-term includes, amongst others:

The future operational costs and revenues associated with the capital programme have been included in the MTREF expenditure. This concomitant operational expenditure is expected to escalate to R15million by 2016/17. It needs to be noted that as part of the 2014/15 MTREF, this expenditure has been factored into the two outer years of the operational budget.

5.7 ANNUAL BUDGET TABLES - PARENT MUNICIPALITY

The following eighteen pages present the ten main budget tables as required in terms of section 8 of the Municipal Budget and Reporting Regulations. These tables set out the municipality's 2013/14 budget and MTREF as approved by the Council. Each table is accompanied by *explanatory notes* on the facing page.

Table 33 MBRR Table A1 - Budget Summary

NC077 Siyathemba - Table A1 Budget Summary

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousands	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Financial Performance									
Property rates	**4 872**	4 687	5 130	8 025	7 947	7 947	8 523	9 025	9 522
Service charges	16 925	15 862	20 875	38 709	27 636	27 636	35 114	37 294	39 440
Investment revenue	71	186	314	350	350	350	400	424	447
Transfers recognised - operational	13 819	22 339	20 110	21 171	21 191	21 191	22 427	23 750	25 056
Other own revenue	2 750	3 609	4 411	6 277	5 450	5 450	7 525	8 341	9 209
Total Revenue (excluding capital transfers and contributions)	38 437	46 683	50 839	74 532	62 574	62 574	73 988	78 834	83 674
Employee costs	21 393	24 454	29 386	36 208	35 848	35 848	38 868	41 381	43 997
Remuneration of councillors	1 474	1 821	1 949	2 381	2 381	2 381	2 575	2 740	2 916
Depreciation & asset impairment	9 305	9 182	–	10 588	10 588	10 588	11 105	11 547	12 286
Finance charges	939	1 070	1 034	757	767	767	792	792	843
Materials and bulk purchases	6 498	11 812	11 700	17 684	17 684	17 684	14 189	15 203	16 053
Transfers and grants	101	6 185	–	7 229	–	–	–	–	–
Other expenditure	18 617	9 353	21 210	30 669	20 067	20 067	20 036	21 086	21 706
Total Expenditure	58 327	63 877	65 280	105 515	87 335	87 335	87 566	92 750	97 801
Surplus/(Deficit)	(19 890)	(17 194)	(14 440)	(30 983)	(24 761)	(24 761)	(13 577)	(13 915)	(14 127)
Transfers recognised - capital	18 265	16 103	26 870	18 370	34 017	34 017	17 087	17 538	18 237
Contributions recognised - capital & contributed assets	–	–	–	–	–	–	–	–	–
Surplus/(Deficit) after capital transfers & contributions	(1 625)	(1 091)	12 429	(12 613)	9 256	9 256	3 510	3 623	4 110
Share of surplus/ (deficit) of associate	–	–	–	–	–	–	–	–	–
Surplus/(Deficit) for the year	(1 625)	(1 091)	12 429	(12 613)	9 256	9 256	3 510	3 623	4 110
Capital expenditure & funds sources									
Capital expenditure	**12 122**	15 307	17 838	23 035	34 200	34 200	13 920	13 700	15 000
Transfers recognised - capital	**12 122**	15 307	17 838	20 635	34 200	34 200	13 920	13 700	15 000
Public contributions & donations	**–**	–	–	–	–	–	–	–	–
Borrowing	**–**	–	–	–	–	–	–	–	–
Internally generated funds	**–**	–	–	2 400	–	–	–	–	–
Total sources of capital funds	**12 122**	15 307	17 838	23 035	34 200	34 200	13 920	13 700	15 000
Financial position									
Total current assets	**6 403**	11 525	10 652	62 937	7 205	7 205	7 739	5 185	5 389
Total non current assets	**254 488**	260 568	283 931	342 658	276 253	276 253	276 314	278 866	279 845
Total current liabilities	**13 755**	24 880	21 793	21 804	13 991	13 991	14 835	12 209	10 505
Total non current liabilities	**14 118**	15 287	17 190	15 695	24 163	24 163	15 695	16 147	16 587
Community wealth/Equity	**233 018**	231 927	255 599	228 411	251 605	251 605	253 523	255 695	258 142
Cash flows									
Net cash from (used) operating	**12 902**	14 259	18 498	3 947	22 931	22 931	23 947	13 974	14 812
Net cash from (used) investing	**(12 142)**	(15 296)	(17 795)	(23 032)	(23 032)	(23 032)	(23 032)	(13 655)	(12 918)
Net cash from (used) financing	**(44)**	2 193	(406)	(361)	(520)	(520)	(361)	(415)	(478)
Cash/cash equivalents at the year end	**147**	1 303	1 600	(23 730)	1 000	1 000	1 554	1 458	2 874
Cash backing/surplus reconciliation									
Cash and investments available	**177**	1 324	1 621	1	1	1	1	1	1
Application of cash and investments	**3 753**	10 239	11 106	(25 459)	6 052	6 052	3 818	4 249	2 065
Balance - surplus (shortfall)	**(3 577)**	(8 915)	(9 485)	25 460	(6 051)	(6 051)	(3 817)	(4 248)	(2 064)
Asset management									
Asset register summary (WDV)	**12 122**	15 308	17 838	11 209	11 177	11 177	13 952	13 731	15 029
Depreciation & asset impairment	**9 305**	9 182	–	10 588	10 588	10 588	11 105	11 547	12 286
Renewal of Existing Assets	**–**	–	–	–	–	–	–	–	–
Repairs and Maintenance	**–**	–	–	–	–	–	–	–	–
Free services									
Cost of Free Basic Services provided	**8 267**	3 936	4 075	2 627	2 627	2 627	9 273	9 783	10 321
Revenue cost of free services provided	**5 476**	6 600	10 398	10 398	10 398	10 398	10 980	11 595	12 244
Households below minimum service level									
Water:	–	–	–	–	–	–	–	–	–
Sanitation/sewerage:	1	1	1	1	1	1	1	1	1
Energy:	0	0	0	0	0	0	0	0	0
Refuse:	5	5	5	5	5	5	5	5	5

Explanatory notes to MBRR Table A1 - Budget Summary

1. Table A1 is a budget summary and provides a concise overview of the Municipality's budget from all of the major financial perspectives (operating, capital expenditure, financial position, cash flow, and MFMA funding compliance).
2. The table provides an overview of the amounts approved by Council for operating performance, resources deployed to capital expenditure, financial position, cash and funding compliance, as well as the municipality's commitment to eliminating basic service delivery backlogs.
3. Financial management reforms emphasises the importance of the municipal budget being funded. This requires the simultaneous assessment of the Financial Performance, Financial Position and Cash Flow Budgets, along with the Capital Budget. The Budget Summary provides the key information in this regard:
    a. The operating surplus/deficit (after Total Expenditure) is positive over the MTREF
    b. Capital expenditure is balanced by capital funding sources, of which
        i. Transfers recognised is reflected on the Financial Performance Budget;
        ii. Borrowing is incorporated in the net cash from financing on the Cash Flow Budget
        iii. Internally generated funds are financed from a combination of the current operating surplus and accumulated cash-backed surpluses from previous years. The amount is incorporated in the Net cash from investing on the Cash Flow Budget. The fact that the municipality's cash flow remains positive, and is improving indicates that the necessary cash resources are available to fund the Capital Budget.
4. The Cash backing/surplus reconciliation shows that in previous financial years the municipality was not paying much attention to managing this aspect of its finances, and consequently many of its obligations are not cash-backed. This place the municipality in a very vulnerable financial position, as the recent slow-down in revenue collections highlighted. Consequently Council has taken a deliberate decision to ensure adequate cash-backing for all material obligations in accordance with the recently adopted Funding and Reserves Policy. This cannot be achieved in one financial year. But over the MTREF there is progressive improvement in the level of cash-backing of obligations. It is anticipated that the goal of having all obligations cash-back will be achieved by 2015/16, when a small surplus is reflected.
5. Even though the Council is placing great emphasis on securing the financial sustainability of the municipality, this is not being done at the expense of services to the poor. The section of Free Services shows that the amount spent on Free Basic Services and the revenue cost of free services provided by the municipality continues to increase. In addition, the municipality continues to make progress in addressing service delivery backlogs. It is anticipated that by 2016/17 the water backlog will have been eliminated.

Table 34 MBRR Table A2 - Budgeted Financial Performance (revenue and expenditure by standard classification)

NC077 Siyathemba - Table A2 Budgeted Financial Performance (revenue and expenditure by standard classification)										
Standard Classification Description	Ref	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	1	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Revenue - Standard										
Governance and administration		15,467	14,016	21,639	24,827	24,066	24,066	27,038	28,851	30,718
Executive and council		745	1,466	721	766	705	705	673	713	752
Budget and treasury office		14,722	12,550	19,658	23,319	22,555	22,555	25,417	27,150	28,898
Corporate services		–	–	1,260	743	806	806	948	988	1,069
Community and public safety		508	601	520	809	891	891	820	868	916
Community and social services		457	601	478	749	831	831	754	798	842
Sport and recreation		–	–	–	–	–	–	–	–	–
Public safety		12	–	–	–	–	–	–	–	–
Housing		38	–	41	60	60	60	66	70	74
Health		–	–	–	–	–	–	–	–	–
Economic and environmental services		18,244	18,946	14,404	22,580	29,358	29,358	11,167	11,424	11,913
Planning and development		18,244	16,053	–	–	–	–	–	–	–
Road transport		–	2,894	14,404	22,580	29,358	29,358	11,167	11,424	11,913
Environmental protection		–	–	–	–	–	–	–	–	–
Trading services		22,481	29,221	41,146	43,480	42,275	42,275	52,050	55,229	58,363
Electricity		7,399	8,969	14,946	24,166	23,276	23,276	31,966	33,852	35,713
Water		6,596	10,305	18,066	8,924	9,008	9,008	9,304	9,853	10,395
Waste water management		8,485	–	5,414	7,588	7,599	7,599	8,230	8,737	9,228
Waste management		–	9,947	2,721	2,802	2,392	2,392	2,550	2,788	3,026
Other	4	–	–	–	–	–	–	–	–	–
Total Revenue - Standard	2	56,700	62,785	77,709	91,696	96,590	96,590	91,075	96,372	101,910
Expenditure - Standard										
Governance and administration		27,837	26,754	29,307	43,246	36,431	36,431	37,162	39,341	41,686
Executive and council		8,283	10,360	11,669	15,611	6,620	6,620	8,242	8,818	9,185
Budget and treasury office		19,554	16,394	13,368	27,423	23,690	23,690	22,934	24,196	25,678
Corporate services		–	–	4,270	212	6,121	6,121	5,986	6,326	6,824
Community and public safety		2,228	2,175	3,015	3,790	3,942	3,942	4,226	4,445	4,676
Community and social services		444	865	920	1,257	1,290	1,290	1,404	1,444	1,484
Sport and recreation		764	1,298	2,082	2,507	2,646	2,646	2,815	2,994	3,185
Public safety		1,019	12	13	26	6	6	7	7	7
Housing		–	–	–	–	–	–	–	–	–
Health		–	–	–	–	–	–	–	–	–
Economic and environmental services		4,593	9,134	8,633	12,471	9,954	9,954	11,291	11,863	12,590
Planning and development		4,593	6,732	–	–	–	–	–	–	–
Road transport		–	2,401	8,613	12,471	9,934	9,934	11,271	11,843	12,570
Environmental protection		–	–	21	–	20	20	20	20	20
Trading services		23,670	25,801	24,321	36,789	37,003	37,003	34,877	37,091	38,838
Electricity		13,816	11,819	13,307	20,455	20,107	20,107	17,088	18,080	19,114
Water		4,482	4,489	4,201	5,557	5,983	5,983	6,216	6,699	6,627
Waste water management		5,372	–	3,628	4,869	5,083	5,083	5,235	5,569	5,925
Waste management		–	9,493	3,185	5,909	5,829	5,829	6,338	6,743	7,171
Other	4	–	13	4	10	5	5	10	10	11
Total Expenditure - Standard	3	58,328	63,877	65,280	96,307	87,335	87,335	87,566	92,750	97,801
Surplus/(Deficit) for the year		(1,629)	(1,093)	12,429	(4,611)	9,256	9,256	3,509	3,622	4,110

Explanatory notes to MBRR Table A2 - Budgeted Financial Performance (revenue and expenditure by standard classification)

1. Table A2 is a view of the budgeted financial performance in relation to revenue and expenditure per standard classification. The modified GFS standard classification divides the municipal services into 4 functional areas. Municipal revenue, operating expenditure and capital expenditure are then classified in terms if each of these functional areas which enables the National Treasury to compile 'whole of government' reports.
2. Note the Total Revenue on this table includes capital revenues (Transfers recognised – capital) and so does not balance to the operating revenue shown on Table A4.
3. Note that as a general principle the revenues for the Trading Services should exceed their expenditures. The table highlights that this is the case for Electricity, Water, Waste water and the Waste management function. As already noted above, the municipality will be undertaking

a detailed study of this function to explore ways of improving efficiencies and provide a basis for re-evaluating the function's tariff structure.

4. Other functions that show a deficit between revenue and expenditure are being financed from rates revenues and other revenue sources reflected under the Corporate Services.

Table 35 MBRR Table A3 - Budgeted Financial Performance (revenue and expenditure by municipal vote)

NC077 Siyathemba - Table A3 Budgeted Financial Performance (revenue and expenditure by municipal vote)

Vote Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Revenue by Vote									
Vote 1 - EXECUTIVE AND COUNCIL	–	–	721	635	705	705	673	713	752
Vote 2 - BUDGET & TREASURY OFFICE	–	–	19 658	23 349	22 555	22 555	25 417	27 150	28 898
Vote 3 - CORPORATE SERVICES	–	–	2 754	2 811	2 730	2 730	3 200	3 549	3 938
Vote 4 - TECHNICAL & ENGINEERING SERVICES	–	–	54 576	66 108	70 600	70 600	61 786	64 961	68 323
Vote 5 -	–	–	–	–	–	–	–	–	–
Vote 6 - [NAME OF VOTE 6]	–	–	–	–	–	–	–	–	–
Vote 7 - [NAME OF VOTE 7]	–	–	–	–	–	–	–	–	–
Vote 8 - [NAME OF VOTE 8]	–	–	–	–	–	–	–	–	–
Vote 9 - [NAME OF VOTE 9]	–	–	–	–	–	–	–	–	–
Vote 10 - [NAME OF VOTE 10]	–	–	–	–	–	–	–	–	–
Vote 11 - [NAME OF VOTE 11]	–	–	–	–	–	–	–	–	–
Vote 12 - [NAME OF VOTE 12]	–	–	–	–	–	–	–	–	–
Vote 13 - [NAME OF VOTE 13]	–	–	–	–	–	–	–	–	–
Vote 14 - [NAME OF VOTE 14]	–	–	–	–	–	–	–	–	–
Vote 15 - [NAME OF VOTE 15]	–	–	–	–	–	–	–	–	–
Total Revenue by Vote	**–**	**–**	**77 709**	**92 902**	**96 590**	**96 590**	**91 075**	**96 372**	**101 910**
Expenditure by Vote *to be appropriated*									
Vote 1 - EXECUTIVE AND COUNCIL	–	–	11 669	7 813	6 620	6 620	8 242	8 818	9 185
Vote 2 - BUDGET & TREASURY OFFICE	–	–	13 368	27 453	23 690	23 690	22 934	24 196	25 678
Vote 3 - CORPORATE SERVICES	–	–	6 638	11 732	9 097	9 097	9 396	9 890	10 562
Vote 4 - TECHNICAL & ENGINEERING SERVICES	–	–	33 605	58 519	47 928	47 928	46 995	49 845	52 377
Vote 5 -	–	–	–	–	–	–	–	–	–
Vote 6 - [NAME OF VOTE 6]	–	–	–	–	–	–	–	–	–
Vote 7 - [NAME OF VOTE 7]	–	–	–	–	–	–	–	–	–
Vote 8 - [NAME OF VOTE 8]	–	–	–	–	–	–	–	–	–
Vote 9 - [NAME OF VOTE 9]	–	–	–	–	–	–	–	–	–
Vote 10 - [NAME OF VOTE 10]	–	–	–	–	–	–	–	–	–
Vote 11 - [NAME OF VOTE 11]	–	–	–	–	–	–	–	–	–
Vote 12 - [NAME OF VOTE 12]	–	–	–	–	–	–	–	–	–
Vote 13 - [NAME OF VOTE 13]	–	–	–	–	–	–	–	–	–
Vote 14 - [NAME OF VOTE 14]	–	–	–	–	–	–	–	–	–
Vote 15 - [NAME OF VOTE 15]	–	–	–	–	–	–	–	–	–
Total Expenditure by Vote	**–**	**–**	**65 280**	**105 516**	**87 335**	**87 335**	**87 566**	**92 750**	**97 801**
Surplus/(Deficit) for the year	**–**	**–**	**12 429**	**(12 613)**	**9 256**	**9 256**	**3 509**	**3 622**	**4 110**

Explanatory notes to MBRR Table A3 - Budgeted Financial Performance (revenue and expenditure by municipal vote)

1. Table A3 is a view of the budgeted financial performance in relation to the revenue and expenditure per municipal vote. This table facilitates the view of the budgeted operating performance in relation to the organisational structure of the Municipality. This means it is possible to present the operating surplus or deficit of a vote. The following table is an analysis of the surplus or deficit for the electricity and water trading services.

Table 36 Surplus/(Deficit) calculations for the trading services

Trading Services	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2013/14	Budget Year +1 2014/15	Budget Year +2 2015/16
Electricity Income	7 961 000	7 701 102	14 782 785	18 194 436	18 019 340	18 019 340	24 165 730	27 342 570	28 157 530
Electricity Expenditure	6 782 000	7 393 273	12 900 412	18 340 939	15 435 683	15 435 683	20 454 760	22 640 230	24 265 460
Surplus / (Deficit)	**1 179 000**	**307 829**	**1 882 373**	**(147)**	**2 583 657**	**2 583 657**	**3 710 970**	**4 702 340**	**3 892 070**
Trading Services	**Audited Outcome**	**Audited Outcome**	**Audited Outcome**	**Original Budget**	**Adjusted Budget**	**Full Year Forecast**	**Budget Year 2013/14**	**Budget Year +1 2014/15**	**Budget Year +2 2015/16**
Water Income	6 654 000	6 963 004	12 180 410	13 100 743	13 077 743	13 077 743	8 923 560	9 820 910	10 830 860
Water Expenditure	4 498 000	4 861 581	8 946 300	1 323 759	7 351 400	7 351 400	5 556 630	5 753 840	6 272 040
Surplus / (Deficit)	**2 156 000**	**2 101 423**	**3 234 110**	**11 776 984**	**5 726 343**	**5 726 343**	**3 366 930**	**4 067 070**	**4 558 820**

2. The electricity trading surplus is deteriorating over the 2014/15 MTREF from This is primarily as a result of the high increases in Eskom bulk purchases and the tariff setting policy of the municipality to buffer the impact of these increases on individual consumers.
3. The surplus on the water account remains relatively constant over the MTREF translating into a surplus.
4. Note that the surpluses on these trading accounts are utilised as an internal funding source for the capital programme for asset renewal, refurbishment and the development of new asset infrastructure, *and are not used to cross-subsidise other municipal services*.

Table 37 MBRR Table A4 - Budgeted Financial Performance (revenue and expenditure)

NC077 Siyathemba - Table A4 Budgeted Financial Performance (revenue and expenditure)

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Revenue By Source									
Property rates	4 870	4 687	5 130	8 025	7 947	7 947	8 523	9 025	9 522
Property rates - penalties & collection charges	2	–							
Service charges - electricity revenue	6 094	7 364	11 762	21 948	18 390	18 390	23 494	24 881	26 249
Service charges - water revenue	5 092	2 295	7 481	8 792	8 792	8 792	9 676	10 247	10 810
Service charges - sanitation revenue	5 740	–	5 387	7 588	7 588	7 588	8 467	8 987	9 491
Service charges - refuse revenue	–	6 203	1 953	2 500	2 500	2 500	2 750	3 000	3 250
Service charges - other	–	–	(5 707)	(2 119)	(9 633)	(9 633)	(9 273)	(9 820)	(10 360)
Rental of facilities and equipment	553	707	622	801	823	823	880	917	993
Interest earned - external investments	71	186	314	350	350	350	400	424	447
Interest earned - outstanding debtors	621	1 320	597	320	500	500	350	371	391
Dividends received	–	–	–	–	–	–	–	–	–
Fines	31	65	54	146	51	51	401	601	801
Licences and permits	1	1	1	–	–	–	–	–	–
Agency services	2	1 127	920	983	983	983	1 032	1 093	1 153
Transfers recognised - operational	13 819	22 339	20 110	21 171	21 191	21 191	22 427	23 750	25 056
Other revenue	1 529	390	2 217	4 028	3 093	3 093	4 862	5 360	5 871
Gains on disposal of PPE	13	–							
Total Revenue (excluding capital transfers and contributions)	**38 437**	**46 683**	**50 839**	**74 532**	**62 574**	**62 574**	**73 988**	**78 834**	**83 674**
Expenditure By Type									
Employee related costs	21 393	24 454	29 386	36 208	35 848	35 848	38 868	41 381	43 997
Remuneration of councillors	1 474	1 821	1 949	2 381	2 381	2 381	2 575	2 740	2 916
Debt impairment	5 161	3 067	6 322	3 165	3 165	3 165	3 194	3 542	3 647
Depreciation & asset impairment	9 305	9 182	–	10 588	10 588	10 588	11 105	11 547	12 286
Finance charges	939	1 070	1 034	757	767	767	792	792	843
Bulk purchases	6 498	9 446	11 262	17 684	17 684	17 684	14 189	15 203	16 053
Other materials	–	2 366	438						
Contracted services	–	–	3 617	7 843	3 875	3 875	2 075	2 140	2 201
Transfers and grants	101	6 185	–	7 229	–	–	–	–	–
Other expenditure	13 456	6 286	11 271	19 661	13 027	13 027	14 767	15 404	15 859
Loss on disposal of PPE									
Total Expenditure	**58 327**	**63 877**	**65 280**	**105 515**	**87 335**	**87 335**	**87 566**	**92 750**	**97 801**
Surplus/(Deficit)	**(19 890)**	**(17 194)**	**(14 440)**	**(30 983)**	**(24 761)**	**(24 761)**	**(13 577)**	**(13 915)**	**(14 127)**
Transfers recognised - capital	18 265	16 103	26 870	18 370	34 017	34 017	17 087	17 538	18 237
Contributions recognised - capital	–	–	–	–	–	–	–	–	–
Contributed assets									
Surplus/(Deficit) after capital transfers & contributions	**(1 625)**	**(1 091)**	**12 429**	**(12 613)**	**9 256**	**9 256**	**3 510**	**3 623**	**4 110**
Taxation									
Surplus/(Deficit) after taxation	**(1 625)**	**(1 091)**	**12 429**	**(12 613)**	**9 256**	**9 256**	**3 510**	**3 623**	**4 110**
Attributable to minorities									
Surplus/(Deficit) attributable to municipality	**(1 625)**	**(1 091)**	**12 429**	**(12 613)**	**9 256**	**9 256**	**3 510**	**3 623**	**4 110**
Share of surplus/ (deficit) of associate									
Surplus/(Deficit) for the year	**(1 625)**	**(1 091)**	**12 429**	**(12 613)**	**9 256**	**9 256**	**3 510**	**3 623**	**4 110**

Explanatory notes to Table A4 - Budgeted Financial Performance (revenue and expenditure)

1. Total revenue is R73.9 million in 2014/15 and escalates to R83.6million by 2016/17. This represents a year-on-year increase.
2. Revenue to be generated from property rates is R8.million in the 2013/14 financial year and increases to R9 .5million by 2016/17 which represents 13 per cent of the operating revenue base of the Municipality and therefore remains a significant funding source for the municipality. It

remains relatively constant over the medium-term and tariff increases have been factored in at 5.5 per cent and 5.4per cent for each of the respective financial years of the MTREF.

3. Services charges relating to electricity, water, sanitation and refuse removal constitutes the biggest component of the revenue basket of the Municipality totalling R44.3 million for the 2014/15 financial year and increasing to R49.8million by 2016/17. For the 2014/15 financial year services charges amount to 45 per cent of the total revenue base. This growth can mainly be attributed to the increase in the bulk prices of electricity and water.
4. Transfers recognised – operating includes the local government equitable share and other operating grants from national and provincial government. It needs to be noted that in real terms the grants receipts from national government are growing rapidly over the MTREF by the percentage share of this revenue source declines due to the more rapid relative growth in service charge revenues.
5. Bulk purchases have significantly increased over the 2010/11 to 2016/17 period escalating from R6, 4 million to R 16 million. These increases can be attributed to the substantial increase in the cost of bulk electricity from Eskom and water from DWAF.
6. Employee related costs and bulk purchases are the main cost drivers within the municipality and alternative operational gains and efficiencies will have to be identified to lessen the impact of wage and bulk tariff increases in future years.

Table 38 MBRR Table A5 - Budgeted Capital Expenditure by vote, standard classification and funding source

NC077 Siyathemba - Table A5 Budgeted Capital Expenditure by vote, standard classification and funding

Vote Description	2010/11	2011/12	2012/13	Current Year 2013/14	2014/15 Medium Term Revenue & Expenditure Framework				
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Capital expenditure - Vote									
Capital Expenditure - Standard									
Governance and administration	–	100	–	–	–	–	–	–	–
Executive and council									
Budget and treasury office		100							
Corporate services									
Community and public safety	–	–	2 136	–	13 500	13 500	–	–	–
Community and social services			2 136						
Sport and recreation									
Public safety									
Housing					13 500	13 500			
Health									
Economic and environmental services	4 958	6 452	–	4 542	4 542	4 542	5 000	6 000	6 500
Planning and development		4 135							
Road transport	4 958	2 317		4 542	4 542	4 542	5 000	6 000	6 500
Environmental protection									
Trading services	7 164	8 755	15 702	18 493	16 158	16 158	8 920	7 700	8 500
Electricity	–	1 634		6 635	4 300	4 300	920	1 200	1 500
Water	7 164	2 721			–	–	1 100		
Waste water management		4 400	11 712	11 858	11 858	11 858	6 900	6 500	7 000
Waste management			3 990		–	–			
Other									
Total Capital Expenditure - Standard	12 122	15 307	17 838	23 035	34 200	34 200	13 920	13 700	15 000
Funded by:									
National Government	12 122	15 307	13 008	20 635	34 200	34 200	13 920	13 700	15 000
Provincial Government									
District Municipality									
Other transfers and grants			4 830						
Transfers recognised - capital	12 122	15 307	17 838	20 635	34 200	34 200	13 920	13 700	15 000
Public contributions & donations									
Borrowing									
Internally generated funds				2 400					
Total Capital Funding	12 122	15 307	17 838	23 035	34 200	34 200	13 920	13 700	15 000

Explanatory notes to Table A5 - Budgeted Capital Expenditure by vote, standard classification and funding source

1. Table A5 is a breakdown of the capital programme in relation to capital expenditure by municipal vote (multi-year and single-year appropriations); capital expenditure by standard classification; and the funding sources necessary to fund the capital budget, including information on capital transfers from national and provincial departments.
2. The MFMA provides that a municipality may approve multi-year or single-year capital budget appropriations.
3. Single-year capital expenditure has been appropriated at R13.9million for the 2014/15 financial year and remains relatively constant over the MTREF at levels of R13.7 million and R15 million respectively for the two outer years.
4. Unlike multi-year capital appropriations, single-year appropriations relate to expenditure that will be incurred in the specific budget year such as the procurement of vehicles and specialized tools and equipment. The budget appropriations for the two outer years are indicative allocations based on the departmental business plans as informed by the IDP and will be reviewed on an annual basis to assess the relevance of the expenditure in relation to the strategic objectives and service delivery imperatives of the Municipality. For the purpose of funding assessment of the MTREF, these appropriations have been included but no commitments will be incurred against single-year appropriations for the two outer-years.
5. All capital over the MTREF will be financed by Grants from National and Provincial government. These funding sources are further discussed in detail in 2.6 (Overview of Budget Funding).

Table 39 MBRR Table A6 - Budgeted Financial Position

NC077 Siyathemba - Table A6 Budgeted Financial Position

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
ASSETS									
Current assets									
Cash	756	2 050	1 621	1	1	1	1	1	1
Call investment deposits	–	–	–	–	–	–	–	–	–
Consumer debtors	2 386	4 598	6 200	47 839	5 689	5 689	3 382	1 329	1 835
Other debtors	1 225	4 530	2 204	14 741	1 000	1 000	4 000	3 500	3 200
Current portion of long-term receivables	1 817	28	17	25	15	15	25	23	22
Inventory	219	319	610	332	500	500	332	332	332
Total current assets	**6 403**	**11 525**	**10 652**	**62 937**	**7 205**	**7 205**	**7 739**	**5 185**	**5 389**
Non current assets									
Long-term receivables	106	69	45	66	38	38	66	65	63
Investments	–	–					–	–	–
Investment property	–	–					–	–	–
Investment in Associate	–	–					–	–	–
Property, plant and equipment	254 382	260 499	283 885	342 560	276 215	276 215	276 215	278 770	279 752
Agricultural							–	–	–
Biological							–		
Intangible	–	–	–	32	–	–	32	31	29
Other non-current assets							–	–	–
Total non current assets	**254 488**	**260 568**	**283 931**	**342 658**	**276 253**	**276 253**	**276 314**	**278 866**	**279 845**
TOTAL ASSETS	**260 891**	**272 093**	**294 582**	**405 596**	**283 458**	**283 458**	**284 053**	**284 050**	**285 234**
LIABILITIES									
Current liabilities									
Bank overdraft	579	726					–	–	–
Borrowing	47	314	520	415	520	520	415	478	549
Consumer deposits	450	483	548	340	550	550	–	–	–
Trade and other payables	9 928	17 046	13 525	21 018	12 500	12 500	11 000	9 000	7 000
Provisions	2 751	6 311	7 199	30	420	420	3 420	2 731	2 955
Total current liabilities	**13 755**	**24 880**	**21 793**	**21 804**	**13 991**	**13 991**	**14 835**	**12 209**	**10 505**
Non current liabilities									
Borrowing	–	2 197	–	1 420	1 561	1 561	1 420	942	393
Provisions	14 118	13 090	17 190	14 275	22 602	22 602	14 275	15 204	16 194
Total non current liabilities	**14 118**	**15 287**	**17 190**	**15 695**	**24 163**	**24 163**	**15 695**	**16 147**	**16 587**
TOTAL LIABILITIES	**27 873**	**40 167**	**38 983**	**37 499**	**38 154**	**38 154**	**30 530**	**28 356**	**27 091**
NET ASSETS	**233 018**	**231 926**	**255 599**	**368 097**	**245 304**	**245 304**	**253 523**	**255 695**	**258 142**
COMMUNITY WEALTH/EQUITY									
Accumulated Surplus/(Deficit)	233 018	231 927	255 599	228 411	251 605	251 605	253 523	255 695	258 142
Reserves	–	–	–	–	–	–	–	–	–
Minorities' interests									
TOTAL COMMUNITY WEALTH/EQUITY	**233 018**	**231 927**	**255 599**	**228 411**	**251 605**	**251 605**	**253 523**	**255 695**	**258 142**

Explanatory notes to Table A6 - Budgeted Financial Position

1. Table A6 is consistent with international standards of good financial management practice, and improves understand ability for councillors and management of the impact of the budget on the statement of financial position (balance sheet).
2. This format of presenting the statement of financial position is aligned to GRAP1, which is generally aligned to the international version which presents Assets less Liabilities as

"accounting" Community Wealth. The order of items within each group illustrates items in order of liquidity; i.e. assets readily converted to cash, or liabilities immediately required to be met from cash, appear first.

3. Table 66 is supported by an extensive table of notes (SA3 which can be found on page 102) providing a detailed analysis of the major components of a number of items, including:
   - Call investments deposits;
   - Consumer debtors;
   - Property, plant and equipment;
   - Trade and other payables;
   - Provisions non-current;
   - Changes in net assets; and
   - Reserves
4. The municipal equivalent of equity is Community Wealth/Equity. The justification is that ownership and the net assets of the municipality belong to the community.
5. Any movement on the Budgeted Financial Performance or the Capital Budget will inevitably impact on the Budgeted Financial Position. As an example, the collection rate assumption will impact on the cash position of the municipality and subsequently inform the level of cash and cash equivalents at year end. Similarly, the collection rate assumption should inform the budget appropriation for debt impairment which in turn would impact on the provision for bad debt. These budget and planning assumptions form a critical link in determining the applicability and relevance of the budget as well as the determination of ratios and financial indicators. In addition the funding compliance assessment is informed directly by forecasting the statement of financial position.

Table 40 MBRR Table A7 - Budgeted Cash Flow Statement

NC077 Siyathemba - Table A7 Budgeted Cash Flows

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
CASH FLOW FROM OPERATING ACTIVITIES									
Receipts									
Ratepayers and other	30 859	17 881	8 710	39 329	39 329	39 329	49 329	53 068	56 316
Government - operating	18 265	22 339	14 606	27 798	21 171	21 171	27 798	29 927	30 166
Government - capital	13 819	16 103	46 939	18 300	18 370	18 370	18 300	9 708	9 821
Interest	692	1 515	314	350	300	300	350	400	450
Dividends		–		–	–	–	–	–	–
Payments									
Suppliers and employees	(49 700)	(42 503)	(53 349)	(79 640)	(55 238)	(55 238)	(69 640)	(77 180)	(79 913)
Finance charges	(932)	(1 070)	(1 034)	(1 376)	(1 000)	(1 000)	(1 376)	(1 449)	(1 528)
Transfers and Grants	(101)	(6)	2 312	(813)	–	–	(813)	(500)	(500)
NET CASH FROM/(USED) OPERATING ACTIVITIES	**12 902**	**14 259**	**18 498**	**3 947**	**22 931**	**22 931**	**23 947**	**13 974**	**14 812**
CASH FLOWS FROM INVESTING ACTIVITIES									
Receipts									
Proceeds on disposal of PPE	(12 151)	(15 307)	(17 838)	–	–	–	–	–	–
Decrease (Increase) in non-current debtors	–	–	26	–	–	–	–	–	–
Decrease (increase) other non-current receivables	9	11	17	3	3	3	3	3	3
Decrease (increase) in non-current investments	–	–		–	–	–	–	–	–
Payments									
Capital assets				(23 035)	(23 035)	(23 035)	(23 035)	(13 658)	(12 921)
NET CASH FROM/(USED) INVESTING ACTIVITIES	**(12 142)**	**(15 296)**	**(17 795)**	**(23 032)**	**(23 032)**	**(23 032)**	**(23 032)**	**(13 655)**	**(12 918)**
CASH FLOWS FROM FINANCING ACTIVITIES									
Receipts									
Short term loans	–	(102)							
Borrowing long term/refinancing		2 262							
Increase (decrease) in consumer deposits	(44)	33	65						
Payments									
Repayment of borrowing			(471)	(361)	(520)	(520)	(361)	(415)	(478)
NET CASH FROM/(USED) FINANCING ACTIVITIES	**(44)**	**2 193**	**(406)**	**(361)**	**(520)**	**(520)**	**(361)**	**(415)**	**(478)**
NET INCREASE/ (DECREASE) IN CASH HELD	**716**	**1 156**	**297**	**(19 446)**	**(621)**	**(621)**	**554**	**(97)**	**1 416**
Cash/cash equivalents at the year begin:	**(569)**	**147**	**1 303**	**(4 284)**	**1 621**	**1 621**	**1 000**	**1 554**	**1 458**
Cash/cash equivalents at the year end:	**147**	**1 303**	**1 600**	**(23 730)**	**1 000**	**1 000**	**1 554**	**1 458**	**2 874**

Explanatory notes to Table A7 - Budgeted Cash Flow Statement

1. The budgeted cash flow statement is the first measurement in determining if the budget is funded.
2. It shows the expected level of cash in-flow versus cash out-flow that is likely to result from the implementation of the budget.
3. It can be seen that the cash levels of the Municipality increased significantly over the 2009/10 to 2014/15 period owing directly to a net increase in cash for the financial year.
4. The approved 2014/15 MTREF provide for a further net increase in cash of R1 million for the 2014/15 financial year resulting in an overall projected positive cash position of R1.5 million at year end.
5. As part of the 2012/13 mid-year review and Adjustments Budget this unsustainable cash position had to be addressed as a matter of urgency and various interventions were implemented such as the reduction of expenditure allocations and rationalization of spending priorities.
6. In addition the Municipality undertook an extensive debt collection drive resulting in cash receipts on arrear debtors. These interventions translated into an expected net cash position of R1.million for the 2014/15 financial year and cash and cash equivalents totalled R1.1 million at year end.
7. The 2014/15 MTREF has been informed by the planning principle of ensuring adequate cash reserves over the medium-term.
8. Cash and cash equivalents totals R1 million as at the end of the 2014/15 financial year and increases to R2.8 million by 2016/17.

Table 41 MBRR Table A8 - Cash Backed Reserves/Accumulated Surplus Reconciliation

NC077 Siyathemba - Table A8 Cash backed reserves/accumulated surplus reconciliation											
Description	Ref	2010/11	2011/12	2012/13	Current Year 2013/14				2014/15 Medium Term Revenue & Expenditure Framework		
R thousand		Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Pre-audit outcome	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Cash and investments available											
Cash/cash equivalents at the year end	1	147	1,303	1,600	(23,730)	1,000	1,000	1,000	1,554	1,458	2,874
Other current investments > 90 days		30	21	21	23,731	(999)	(999)	(999)	(1,553)	(1,457)	(2,873)
Non current assets - Investments	1	–	–	–	–	–	–	–	–	–	–
Cash and investments available:		**177**	**1,324**	**1,621**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Application of cash and investments											
Unspent conditional transfers		–	–	2,880	6,032	–	–	–	–	–	–
Unspent borrowing		–	–	–	–	–	–		–	–	–
Statutory requirements	2										
Other working capital requirements	3	3,753	10,239	8,226	(31,491)	6,052	6,052	6,052	3,818	4,249	2,065
Other provisions											
Long term investments committed	4	–	–	–	–	–	–	–	–	–	–
Reserves to be backed by cash/investments	5										
Total Application of cash and investments:		**3,753**	**10,239**	**11,106**	**(25,459)**	**6,052**	**6,052**	**6,052**	**3,818**	**4,249**	**2,065**
Surplus(shortfall)		**(3,577)**	**(8,915)**	**(9,485)**	**25,460**	**(6,051)**	**(6,051)**	**(6,051)**	**(3,817)**	**(4,248)**	**(2,064)**

Explanatory notes to Table A8 - Cash Backed Reserves/Accumulated Surplus Reconciliation

1. The cash backed reserves/accumulated surplus reconciliation is aligned to the requirements of MFMA Circular 42 – Funding a Municipal Budget.
2. In essence the table evaluates the funding levels of the budget by firstly forecasting the cash and investments at year end and secondly reconciling the available funding to the liabilities/commitments that exist.
3. The outcome of this exercise would either be a surplus or deficit. A deficit would indicate that the applications exceed the cash and investments available and would be indicative of non-compliance with the MFMA requirements that the municipality's budget must be "funded".
4. Non-compliance with section 18 of the MFMA is assumed because a shortfall would indirectly indicate that the annual budget is not appropriately funded.
5. From the table it can be seen that for the period 2010/11 to 2014/15 the surplus escalating to R1.5million in the 2014/2015 financial year. Considering the requirements of section 18 of the MFMA, it can be concluded that the adopted 2014/15 MTREF was funded owing to the significant remaining surplus.
6. As part of the budgeting and planning guidelines that informed the compilation of the 2014/15 MTREF the end objective of the medium-term framework was to ensure the budget is funded aligned to section 18 of the MFMA.

Table 42 MBRR Table A9 - Asset Management

NC077 Siyathemba - Table A9 Asset Management										
Description	Ref	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
R thousand		Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
CAPITAL EXPENDITURE										
Total New Assets	1	12,122	15,308	17,838	11,177	11,177	11,177	13,920	13,700	15,000
Infrastructure - Road transport		4,958	2,317	–	4,542	4,542	4,542	5,000	6,000	6,500
Infrastructure - Electricity		–	1,634	–	6,635	6,635	6,635	920	1,200	1,500
Infrastructure - Water		7,164	2,721	–	–	–	–	1,100	–	–
Infrastructure - Sanitation		–	1,101	11,712	–	–	–	6,900	6,500	7,000
Infrastructure - Other		–	7,535	3,990	–	–	–	–	–	–
Infrastructure		*12,122*	*15,308*	*15,702*	*11,177*	*11,177*	*11,177*	*13,920*	*13,700*	*15,000*
Community		–	–	2,136	–	–	–	–	–	–
Heritage assets		–	–	–	–	–	–	–	–	–
Investment properties		–	–	–	–	–	–	–	–	–
Other assets	6	–	–	–	–	–	–	–	–	–
Agricultural Assets		–	–	–	–	–	–	–	–	–
Biological assets		–	–	–	–	–	–	–	–	–
Intangibles		–	–	–	–	–	–	–	–	–
Total Renewal of Existing Assets	2	–	–	–	–	–	–	–	–	–
Infrastructure - Road transport		–	–	–	–	–	–	–	–	–
Infrastructure - Electricity		–	–	–	–	–	–	–	–	–
Infrastructure - Water		–	–	–	–	–	–	–	–	–
Infrastructure - Sanitation		–	–	–	–	–	–	–	–	–
Infrastructure - Other		–	–	–	–	–	–	–	–	–
Infrastructure		–	–	–	–	–	–	–	–	–
Community		–	–	–	–	–	–	–	–	–
Heritage assets		–	–	–	–	–	–	–	–	–
Investment properties		–	–	–	–	–	–	–	–	–
Other assets	6	–	–	–	–	–	–	–	–	–
Agricultural Assets		–	–	–	–	–	–	–	–	–
Biological assets		–	–	–	–	–	–	–	–	–
Intangibles		–	–	–	–	–	–	–	–	–
Total Capital Expenditure	4									
Infrastructure - Road transport		4,958	2,317	–	4,542	4,542	4,542	5,000	6,000	6,500
Infrastructure - Electricity		–	1,634	–	6,635	6,635	6,635	920	1,200	1,500
Infrastructure - Water		7,164	2,721	–	–	–	–	1,100	–	–
Infrastructure - Sanitation		–	1,101	11,712	–	–	–	6,900	6,500	7,000
Infrastructure - Other		–	7,535	3,990	–	–	–	–	–	–
Infrastructure		*12,122*	*15,308*	*15,702*	*11,177*	*11,177*	*11,177*	*13,920*	*13,700*	*15,000*
Community		–	–	2,136	–	–	–	–	–	–
Heritage assets		–	–	–	–	–	–	–	–	–
Investment properties		–	–	–	–	–	–	–	–	–
Other assets		–	–	–	–	–	–	–	–	–
Agricultural Assets		–	–	–	–	–	–	–	–	–
Biological assets		–	–	–	–	–	–	–	–	–
Intangibles		–	–	–	–	–	–	–	–	–
TOTAL CAPITAL EXPENDITURE - Asset class	2	12,122	15,308	17,838	11,177	11,177	11,177	13,920	13,700	15,000
ASSET REGISTER SUMMARY - PPE (WDV)	5									
Infrastructure - Road transport		4,958	2,317	–	4,542	4,542	4,542	5,000	6,000	6,500
Infrastructure - Electricity		–	1,634	–	6,635	6,635	6,635	920	1,200	1,500
Infrastructure - Water		7,164	2,721	–	–	–	–	1,100	–	–
Infrastructure - Sanitation			1,101	11,712	–	–	–	6,900	6,500	7,000
Infrastructure - Other			7,535	3,990	–	–	–	–	–	–
Infrastructure		*12,122*	*15,308*	*15,702*	*11,177*	*11,177*	*11,177*	*13,920*	*13,700*	*15,000*
Community				2,136						
Heritage assets										
Investment properties		–	–	–	–	–	–	–	–	–
Other assets										
Agricultural Assets		–	–	–	–	–	–	–	–	–
Biological assets		–	–	–	–	–	–	–	–	–
Intangibles		–	–	–	32	–	–	32	31	29
TOTAL ASSET REGISTER SUMMARY - PPE (WDV)	5	12,122	15,308	17,838	11,209	11,177	11,177	13,952	13,731	15,029
EXPENDITURE OTHER ITEMS										
Depreciation & asset impairment		9,305	9,182	–	10,588	10,588	10,588	11,105	11,547	12,286
Repairs and Maintenance by Asset Class	3	–	–	–	–	–	–	–	–	–
Infrastructure - Road transport		–	–	–	–	–	–	–	–	–
Infrastructure - Electricity		–	–	–	–	–	–	–	–	–
Infrastructure - Water		–	–	–	–	–	–	–	–	–
Infrastructure - Sanitation		–	–	–	–	–	–	–	–	–
Infrastructure - Other		–	–	–	–	–	–	–	–	–
Infrastructure		–	–	–	–	–	–	–	–	–
Community		–	–	–	–	–	–	–	–	–
Heritage assets		–	–	–	–	–	–	–	–	–
Investment properties		–	–	–	–	–	–	–	–	–
Other assets	6, 7	–	–	–	–	–	–	–	–	–
TOTAL EXPENDITURE OTHER ITEMS		9,305	9,182	–	10,588	10,588	10,588	11,105	11,547	12,286
Renewal of Existing Assets as % of total capex		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Renewal of Existing Assets as % of deprecn"		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
R&M as a % of PPE		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Renewal and R&M as a % of PPE		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

Explanatory notes to Table A9 - Asset Management

1. Table A9 provides an overview of municipal capital allocations to building new assets and the renewal of existing assets, as well as spending on repairs and maintenance by asset class.
2. National Treasury has recommended that municipalities should allocate at least 40 per cent of their capital budget to the renewal of existing assets, and allocations to repairs and maintenance should be 8 per cent of PPE. The Municipality does not meet both these recommendations as the focus of resources is on new Basic service infrastructure and repair and maintenance amounts to 3 per cent.

Table 43 MBRR Table A10 - Basic Service Delivery Measurement

NC077 Siyathemba - Table A10 Basic service delivery measurement

Description	2010/11	2011/12	2012/13	Current Year 2013/14			2014/15 Medium Term Revenue & Expenditure Framework		
	Outcome	Outcome	Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Household service targets									
Water:									
Piped water inside dwelling	2 621	3 150	3 150	3 150	3 150	3 150	3 150	3 150	3 150
Piped water inside yard (but not in dwelling)	2 058	2 200	2 200	2 200	2 200	2 200	2 200	2 200	2 200
Using public tap (at least min.service level)	238	–	–	–	–	–	–	–	–
Other water supply (at least min.service level)	–	–	–	–	–	–	–	–	–
Minimum Service Level and Above sub-total	4 917	5 350	5 350	5 350	5 350	5 350	5 350	5 350	5 350
Using public tap (< min.service level)									
Other water supply (< min.service level)									
No water supply									
Below Minimum Service Level sub-total	–	–	–	–	–	–	–	–	–
Total number of households	**4 917**	**5 350**	**5 350**	**5 350**	**5 350**	**5 350**	**5 350**	**5 350**	**5 350**
Sanitation/sewerage:									
Flush toilet (connected to sewerage)	4 000	4 100	4 100	4 100	4 100	4 100	4 100	4 100	4 100
Flush toilet (with septic tank)	1 305	1 350	1 350	1 350	1 350	1 350	1 350	1 350	1 350
Chemical toilet	–	–	–	–	–	–	–	–	–
Pit toilet (ventilated)	776	776	776	776	776	776	776	776	776
Other toilet provisions (> min.service level)	–	–	–	–	–	–	–	–	–
Minimum Service Level and Above sub-total	6 081	6 226	6 226	6 226	6 226	6 226	6 226	6 226	6 226
Bucket toilet	205	205	205	205	205	205	205	205	205
Other toilet provisions (< min.service level)	–	–	–	–	–	–	–	–	–
No toilet provisions	335	335	335	335	335	335	335	335	335
Below Minimum Service Level sub-total	540	540	540	540	540	540	540	540	540
Total number of households	**6 621**	**6 766**	**6 766**	**6 766**	**6 766**	**6 766**	**6 766**	**6 766**	**6 766**
Energy:									
Electricity (at least min.service level)	4 349	4 349	4 349	4 349	4 349	4 349	4 349	4 349	4 349
Electricity - prepaid (min.service level)	400	–		–	–	–	–	–	–
Minimum Service Level and Above sub-total	4 749	4 349	4 349	4 349	4 349	4 349	4 349	4 349	4 349
Electricity (< min.service level)	233	120	120	233	233	233	233	233	233
Electricity - prepaid (< min. service level)	–	–		–	–	–	–	–	–
Other energy sources	–	–		–	–	–	–	–	–
Below Minimum Service Level sub-total	233	120	120	233	233	233	233	233	233
Total number of households	**4 982**	**4 469**	**4 469**	**4 582**	**4 582**	**4 582**	**4 582**	**4 582**	**4 582**
Refuse:									
Removed at least once a week	5 069	5 000	5 000	5 000	5 000	5 000	5 000	5 000	5 000
Minimum Service Level and Above sub-total	5 069	5 000	5 000	5 000	5 000	5 000	5 000	5 000	5 000
Removed less frequently than once a week	–	–		–	–	–	–	–	–
Using communal refuse dump	5 069	5 069	5 069	5 069	5 069	5 069	5 069	5 069	5 069
Using own refuse dump	–	–		–	–	–	–	–	–
Other rubbish disposal	–	–		–	–	–	–	–	–
No rubbish disposal	–	–		–	–	–	–	–	–
Below Minimum Service Level sub-total	5 069	5 069	5 069	5 069	5 069	5 069	5 069	5 069	5 069
Total number of households	**10 138**	**10 069**	**10 069**	**10 069**	**10 069**	**10 069**	**10 069**	**10 069**	**10 069**
Households receiving Free Basic Service									
Water (6 kilolitres per household per month)	2 452	2 452	2 452	2 452	2 452	2 452	2 758	2 758	2 758
Sanitation (free minimum level service)	2 452	2 452	2 452	2 452	2 452	2 452	2 758	2 758	2 758
Electricity/other energy (50kwh per household per month)	2 452	2 452	2 452	2 452	2 452	2 452	2 758	2 758	2 758
Refuse (removed at least once a week)	2 452	2 452	2 452	2 452	2 452	2 452	2 758	2 758	2 758
Cost of Free Basic Services provided (R'000)									
Water (6 kilolitres per household per month)	1 523	1 635	1 635	165	165	165	2 691	2 839	2 995
Sanitation (free sanitation service)	5 602	1 182	1 182	318	318	318	4 252	4 486	4 732
Electricity/other energy (50kwh per household per month)	1 142	1 119	1 119	2 004	2 004	2 004	303	320	338
Refuse (removed once a week)			140	140	140	140	2 027	2 139	2 256
Total cost of FBS provided (minimum social package)	**8 267**	**3 936**	**4 075**	**2 627**	**2 627**	**2 627**	**9 273**	**9 783**	**10 321**
Highest level of free service provided									
Property rates (R value threshold)	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000	15 000

Water (kilolitres per household per month)	6	6	6	6	6	6	6	6	6
Sanitation (kilolitres per household per month)	–	–	–						
Sanitation (Rand per household per month)	121	133	133	317 705	317 705	317 705	199	210	222
Electricity (kwh per household per month)	50	50	50	50	50	50	50	50	50
Refuse (average litres per week)	44	47	4				1	1	1
Revenue cost of free services provided (R'000)									
Property rates (R15 000 threshold rebate)									
Property rates (other exemptions, reductions and rebates)			2 789	2 789	2 789	2 789	2 946	3 111	3 285
Water	1 540	1 800							
Sanitation	1 635	1 950	3 812	3 812	3 812	3 812	4 026	4 251	4 489
Electricity/other energy	1 182	1 500	2 119	2 119	2 119	2 119	2 237	2 363	2 495
Refuse	1 119	1 350	1 677	1 677	1 677	1 677	1 771	1 870	1 975
Municipal Housing - rental rebates									
Housing - top structure subsidies									
Other									
Total revenue cost of free services provided (total social package)	**5 476**	**6 600**	**10 398**	**10 398**	**10 398**	**10 398**	**10 980**	**11 595**	**12 244**

Explanatory notes to Table A10 - Basic Service Delivery Measurement

1. Table A10 provides an overview of service delivery levels, including backlogs (below minimum service level), for each of the main services.
2. The Municipality continues to make good progress with the eradication of backlogs:
    a. Water services – backlog is very small and will be eradicated as soon as a provincial Housing project is completed in three years' time. These households are largely found in 'reception areas' and will need to be moved to formal areas so that they can receive services.
    b. Sanitation services – backlog is very small and will be eradicated as soon as a provincial Housing project is completed in three years' time.
    c. Electricity services – backlog will be eradicated over the MTREF. As indicated elsewhere, the emphasis in the electricity sector is on addressing urgent network upgrades.
    d. Refuse services – backlog does not exist at this stage.
3. The budget provides for 2758 households to be registered as indigent in 2014/15, and therefore entitled to receiving Free Basic Services. The number is set to increase to 3782 households given the rapid rate of in-migration to the Municipality, especially by poor people seeking economic opportunities.
4. It is anticipated that these Free Basic Services will cost the municipality R10.9 million in 2014/15 increasing to R12.2 million in 2016/17. This is covered by the municipality's equitable share allocation from national government.

5.7.1 POLICIES

The status of Policies is as follows:[21]

Table 44: Policies

Policy	Status
Tariff Policy	A draft Tariff Policy is available. The Municipality aims to finalise the Policy by the end of May 2014. There is however concept tariffs structure available for the 2014/15 financial year.
Rates Policy	The Municipality has a Rates Policy in place.
Supply Chain Policy	The Municipality has a Supply Chain Policy in place.

Each year, the Municipality revises the tariffs and rates according to the latest legislation. For example, Circular 58 from National Treasury provided guidelines to the Municipalities on the increase of tariffs for the coming financial year. Siyathemba Municipality increased the tariffs with a higher percentage as was referred to in this Circular. The Municipality had to do this in order to better their position with regards to financial viability. The proposed tariffs and rates are communicated to the communities during the IDP, and SDBIP Public Participation Process.

The Municipality is busy with the General Valuation Roll and funds from the Financial Management Grant and the Municipal Systems Improvement Grant will be utilised for this purpose.

The jurisdiction area of Siyathemba Municipality increased when the District Management Area was allocated to Local Municipalities. The rates and taxes paid by the farms differ from the rates and taxes paid by the farmers previously part of the Municipality. The Rates and Tariff Policies and Structures still have to be negotiated with the “new farmers”.

Since the municipality does not render any services on the farms, they give 30% discount to the farmers with regards to rates and taxes.

5.7.2 FINANCIAL SOURCES

The 7 year MTEF schedule is indicated in the tables above.

5.7.3 STAFFING OF THE FINANCE AND SCM UNITS

Most of the positions in the financial division on the current Organogram of the Municipality are filled. The position of the CFO, Principal Clerk, Senior Clerk Income, Reporting Clerk and SCM Clerks are vacant.

The current structure of this Division (Organogram) does however support the work which the Division needs to perform and is not in line with latest legislation. The Chief Financial Officer also requested a person responsible for Risk Management and Asset Management. The Municipality did

21 Interview with Mr Nieuwenhuisen on 25 April 2012

establish an Evaluation and an Adjudication Committee to take responsibility for the tender processes. There is however no Specifications Committee in place.

5.7.4 PAYMENT OF CREDITORS

The Municipal Finance Management Act stipulates that a Municipality needs to pay creditors within 30 days. The Municipality is currently not in the position to do this. The status with regards to payment of creditors is as follows:

- The Municipality succeeds to pay creditors within 30 days on capital projects.
- With regards to operational costs, the Municipality's cash flow and financial position is not in such a condition that payments can be made within 30 days. They prioritize the payment of local suppliers, as well as key clients/suppliers.
- On average, the CFO indicates that they pay creditors on an average of 128 days.

During this financial year, the Municipality started to implement a new Creditors System. They generate an Order for any expenses which is envisaged and payments are then made according to this Order. This System has made a positive contribution towards the management of payment of creditors.

5.7.5 FINANCIAL MANAGEMENT SYSTEMS

The Municipality is making use of the Sebata Financial Management System. This is a fully integrated Municipal Financial Management System. It consists of a minimum of 12 standard Modules, designed to be fully integrated, providing comprehensive and holistic municipal financial management functionality. The System is designed to run in small, medium and large Municipalities and has the built in flexibility to run diverse methods of financial management. Sebata FMS conforms to various municipal accounting practices and reporting standards such as GAMAP, GRAP, SA National Government Statistics and SALGA.

Siyathemba Municipality is however not in the position to make use of all the functionalities of the System.

5.7.6 AUDIT GENERAL FINDINGS

Siyathemba Municipality submits there Annual report and Annual financial statements to National Treasury on an annual basis. As from The Auditor General withheld an opinion on the financial statements and issued a disclaimer.

5.7.7 CHALLENGES

1. The municipality is currently not financial viable. This is mainly due to low cost recovery, the structure of the tariffs for services, revenue collection, etc. The municipality is in need of a proper financial viability study which can describe the status quo and develop recommendations to turn around the financial situation of the municipality.
2. For the past number of years, the municipality is not in the position to obtain a clean audit.

3. The municipality succeeded in compiling asset register on immovable assets. Conditional assessments were also done as part of this exercise. The municipality must also now implement phase 2 of this programme.

5.8 LOCAL ECONOMIC DEVELOPMENT

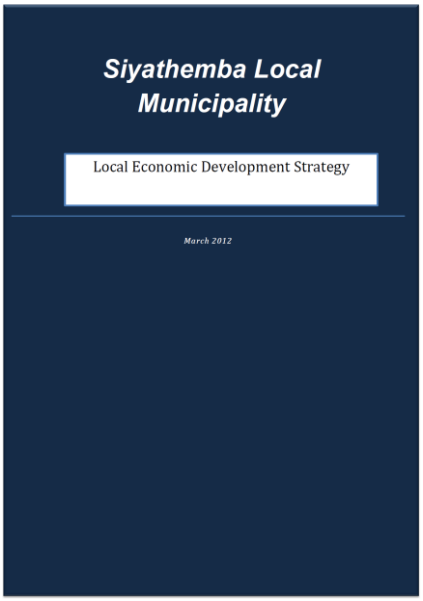
Strategic Objective	Create an Environment that Promotes the Development of the Local Economy and Facilitate Job Creation
Intended Outcome	Improved Municipal Economic Viability

5.8.1 LOCAL ECONOMIC DEVELOPMENT STRATEGY

Local Economic Development (LED) is an approach to sustainable economic development that encourages residents of local communities to work together to stimulate local economic activity that will result in, inter alia, an improvement in the quality of life for all in the local community.

The Department of Economic Development and Tourism in the Northern Cape has recently concluded the development of its Provincial LED Strategy in line with the Northern Cape Growth and Development Strategy. These Strategies provide the foundation for Integrated Economic Development Planning throughout the Northern Cape. To provide the necessary implementation impetus at the local level, the Siyathemba Local Municipality embarked on a process of developing its own LED Strategy in line with provincial planning imperatives.

This Strategy is still a Draft Version and needs to be approved by Council.



5.8.2 UNEMPLOYMENT RATE

In the LED Strategy, Quantec Research 2012 data was used. It is indicated that the Unemployment rate for Siyathemba Municipality during 2009 was 34.7%. The table below indicates other relevant percentages with regards to the labour force.

Table 45: Regional Employment Indicators

Labour Indicators	South Africa		Northern Cape		Pixley Ka Seme DM		Siyathemba LM	
	2000	2009	2000	2009	2000	2009	2000	2009
Labour force ('000)	11,502	12,261	245	272	44	41	5	5
Unemployment rate (%)	30.2	25.1	27.0	27.6	27.7	33.0	26.8	34.7
Labour force participation rate (%)	61.1	52.0	52.5	53.3	54.0	53.6	53.2	57.4
Highly Skilled Workers	12.3%	12.7%	10.7%	11.7%	9.4%	10.9%	9.3%	10.4%
Skilled Workers	39.3%	42.7%	35.4%	39.7%	34.3%	38.6%	34.9%	37.8%
Semi- and unskilled workers	48.4%	44.5%	53.8%	48.6%	56.3%	50.6%	55.8%	51.8%

Source: Quantec Research, 2012

From this Table, the following observations were made:

- While the number of jobs increased in South Africa, as well as the Northern Cape and Pixley Ka Seme between 2000 and 2009, it declined in Siyathemba.
- During 2009, the unemployment rate for Siyathemba was estimated at some 34.7%, which was slightly higher than the District Average. The unemployment rate has steadily increased in Siyathemba over the past decade.

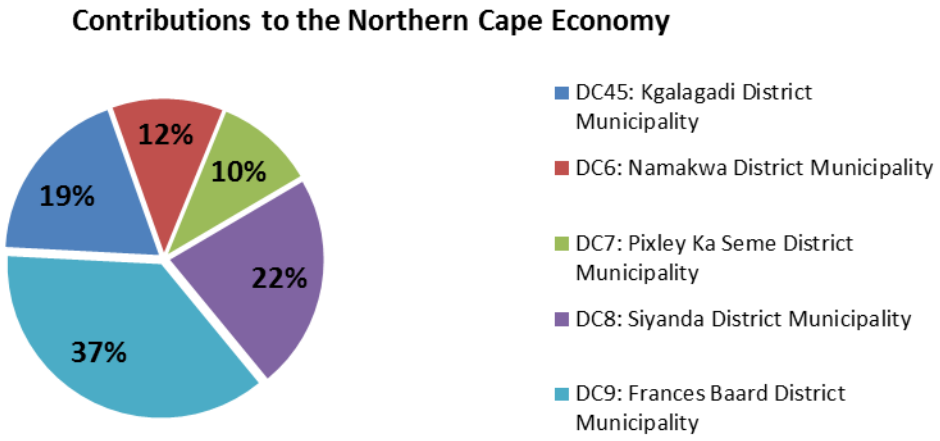
- The labour force participation rate indicates the portion of working-age adults who are employed and those actively seeking employment. Since 2000, the portion of such adults increased from 53.2% to 57.4%.
- Compared to the other Regions under observation, a small portion of workers (10.3%) in Siyathemba can be classified as highly skilled. In fact, more than 52% of workers can be regarded as semi- or unskilled workers.

5.8.3 ECONOMIC PROFILE

5.8.3.1 Economy of the Northern Cape Province and Pixley ka Seme district

The Northern Cape Province is divided into five Districts and each District contributes to the economy of the Province. The Pixley ka Seme District is the poorest contributor, contributing 10%. Frances Baard is the biggest contributor at 36%.

Figure 7: District Contributions to the Province in Percentage - 2005[22]

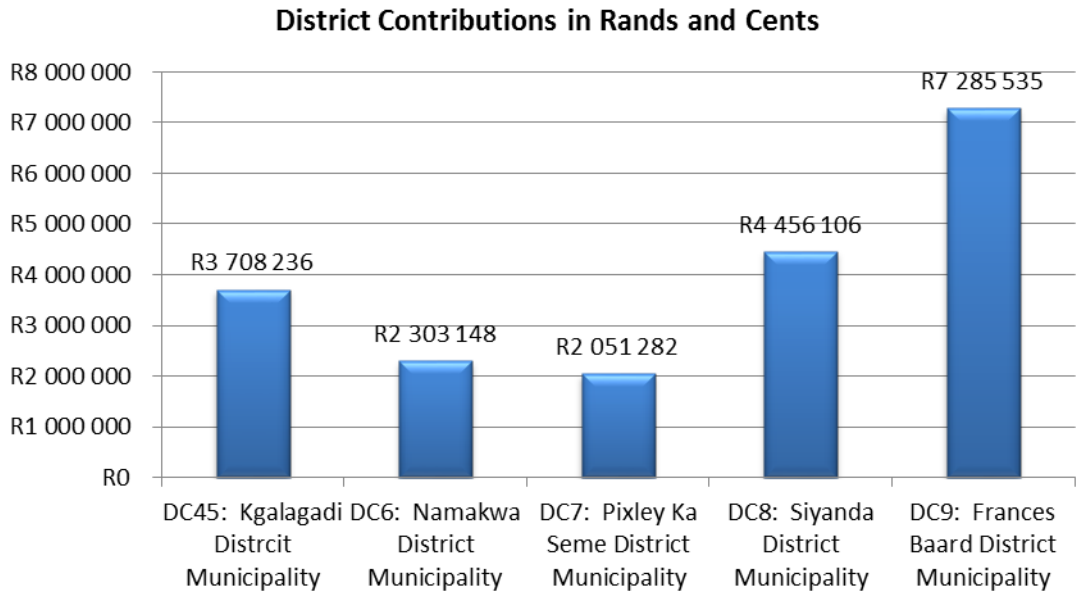


In Rands and cents, the district contributions to the economy of the Province are as follows.

Figure 8: District Contributions in Rands and Cents - 2005[23]

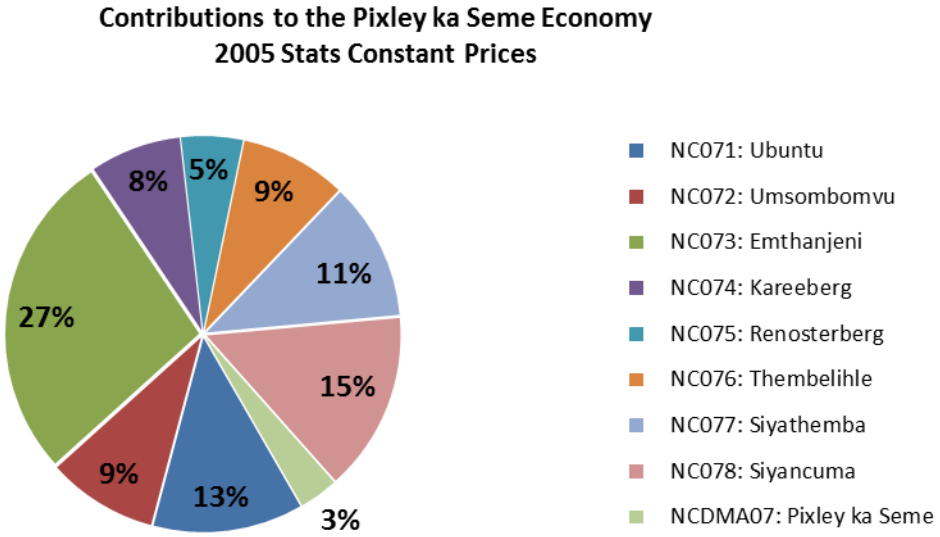
22 Economic Data. Provided by DBSA. File received 14 March 2008.

23 Economic Data. Provided by DBSA. File received 14 March 2008.



The district economy is also dependent on the contributions of the local economies and in the Pixley ka Seme District, the biggest local contributor is Emthanjeni Local Municipality at 27%, followed by Siyancuma Local Municipality (15%), Ubuntu Local Municipality (13%) and Siyathemba Local Municipality (11%).

Figure 9: Local Contributions to the Economy of the District – 2005



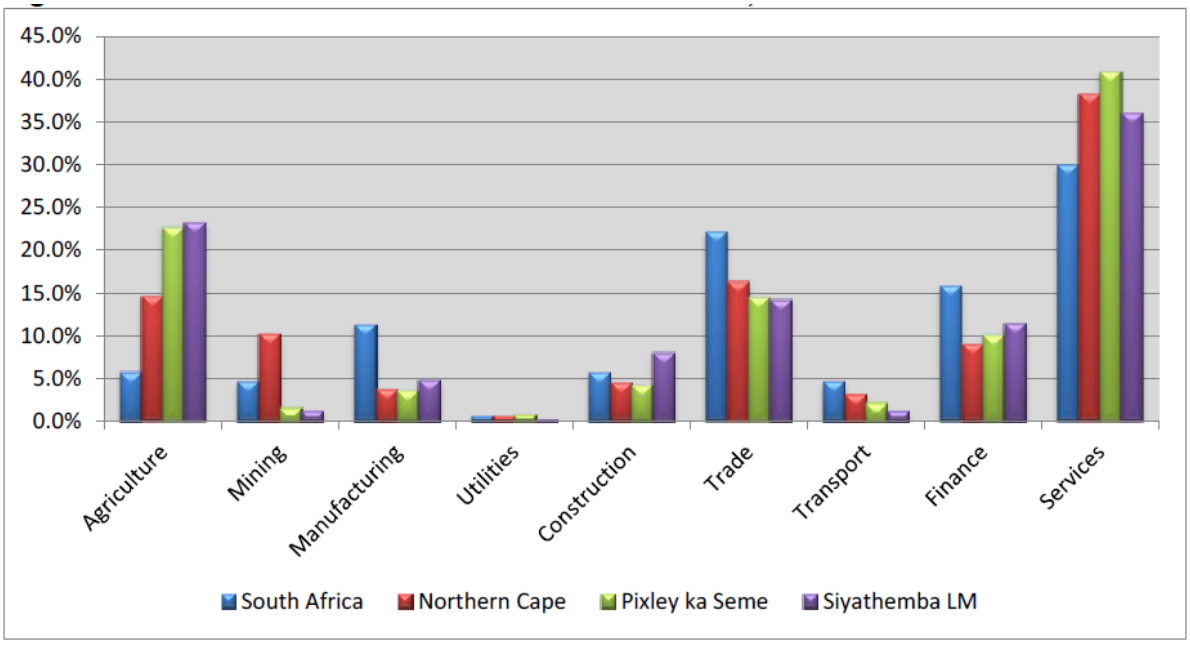
5.8.3.2 Sector Contributions to the Economy

The information in this sub section of the Report was taken directly from the LED Strategy from the Municipality. It provides an analysis of the local economy in the context of the National, Provincial, and District Environment.

a. Labour Profile Overview

The 2010 sectoral distribution of the labour force in South Africa, the Northern Cape, Pixley ka Seme and Siyathemba is illustrated in the figure below. From this Profile, it is evident that most workers in Siyathemba are employed in the Government Services Sector (around 1,700 workers), followed by Agriculture (about 1,100 workers) and the Trade (about 670 workers) sectors.

Figure 10: Sectoral distribution of the Labour Force

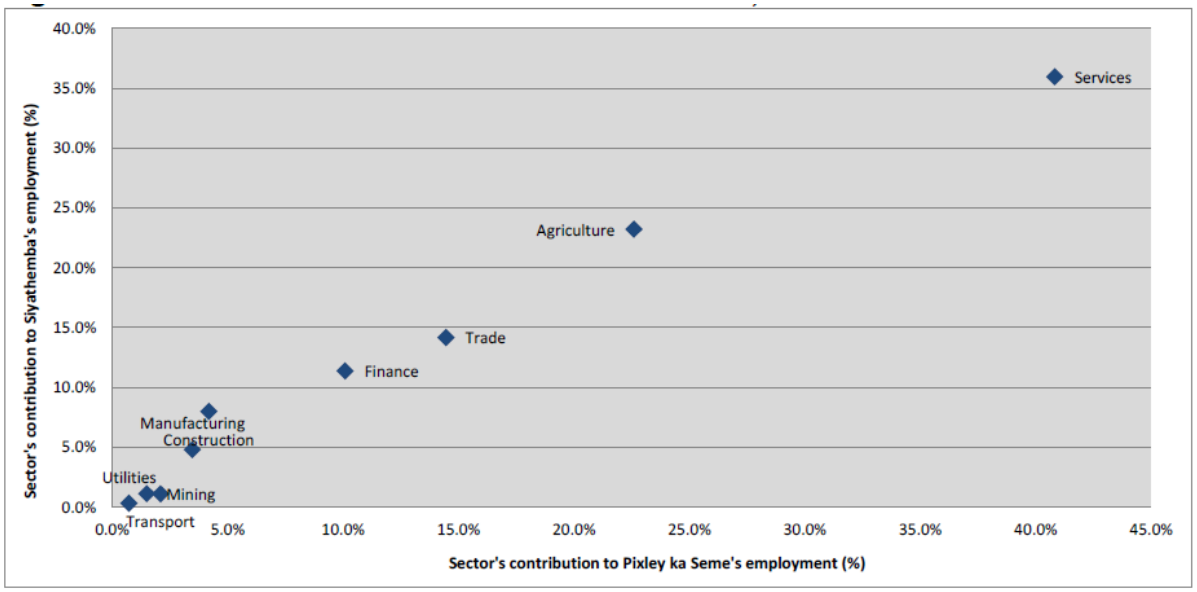


Source: Quantec Research, 2012

Figure 14 provides a closer comparison between the sectoral labour profiles of Pixley ka Seme and Siyathemba. When compared to the District, it can be observed that the labour force of Siyathemba is highly concentrated in the Services Sector, while the other Regions under observation have a more balanced labour distribution.

Local and Regional Trends in total employment are depicted by Figure 15. From this Figure, it is clear that total employment in Siyathemba has been in fluctuating over the last ten years. Moreover, employment in the Study Area declined marginally from some 4,800 jobs during 2000 to just below 4,700 in 2010. Over a ten-year period, this could be translated to an average annual decline of 0.2%. Over the same period, employment in Pixley ka Seme declined by 1.3% on average per annum, while that of the Northern Cape and South Africa increased by 0.9% and 0.5% respectively.

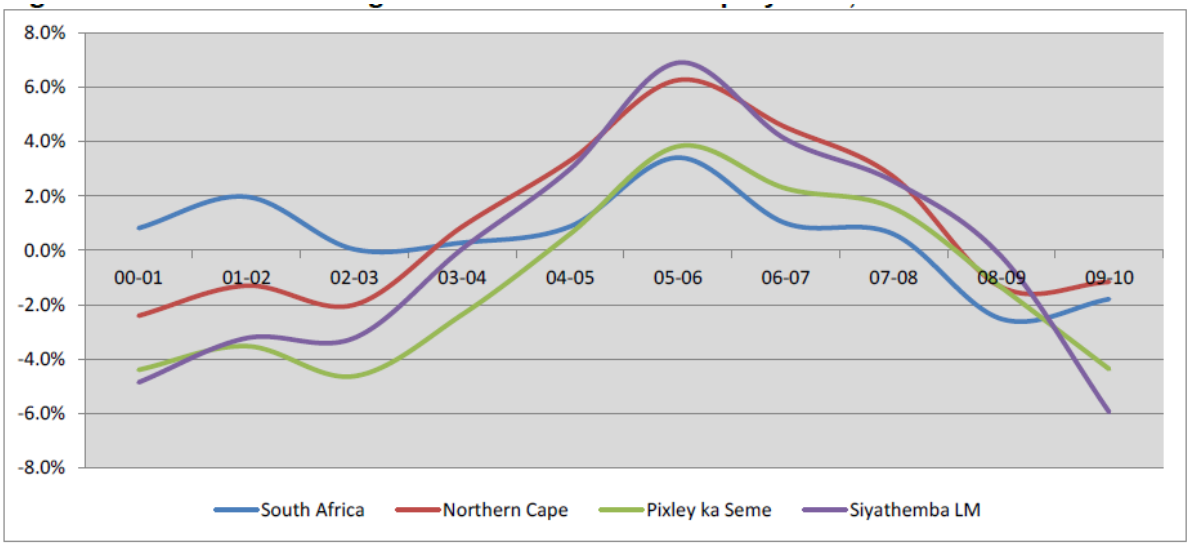
Figure 11: Sectoral distribution of the Labour Force



Source: Quantec Research, 2012

It is also observed that local employment trends are not well-integrated with that of the larger Region, which could be attributed to the concentrated nature (in the Agriculture sector) of the local economy. In contrast, employment trends in Pixley ka Seme, the Northern Cape and South Africa follow growth profiles that are better correlated due to higher levels of diversity in these economies. The threat presented by employment vulnerability and its socio-economic implications for local communities in Siyathemba cannot be emphasised enough.

Figure 12: Local and Regional Trends in Total Employment 2011



Source: Quantec Research, 2012

Employment growth is broken down by sector in Table 24. From this Table, it is evident that employment in the Mining Sector (-7.9% p.a.) has been in steep decline over the past decade, followed by Transport (-5.3%) and Agriculture (-4.9%).

Table 46: Average Annual Employment Growth by Sector, 2000-2010

Sector	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Agriculture	-7.3%	-5.5%	-6.2%	-4.9%
Mining	2.8%	3.9%	0.5%	-7.9%
Manufacturing	-1.2%	-3.2%	-2.4%	4.1%
Utilities	1.1%	2.5%	1.8%	-2.0%
Construction	0.1%	-0.3%	-3.4%	1.5%
Trade	1.1%	2.2%	-0.5%	-1.2%
Transport	2.1%	3.1%	-2.1%	-5.3%
Finance	2.6%	5.3%	7.6%	6.6%
Services	1.6%	3.1%	1.4%	3.2%
Total	**0.5%**	**0.9%**	**-1.3%**	**-0.2%**

Source: Quantec Research, 2012

When these employment trends are compared with those observed for GDP, it is noted that total employment declined over the past decade (by 2.5% p.a.) while the economy grew by 2.0% per annum in GDP terms. This phenomenon is referred to as "jobless growth" which implies that local economy is becoming less labour intensive and more capital intensive.

5.8.4 POTENTIAL SECTORS[24]

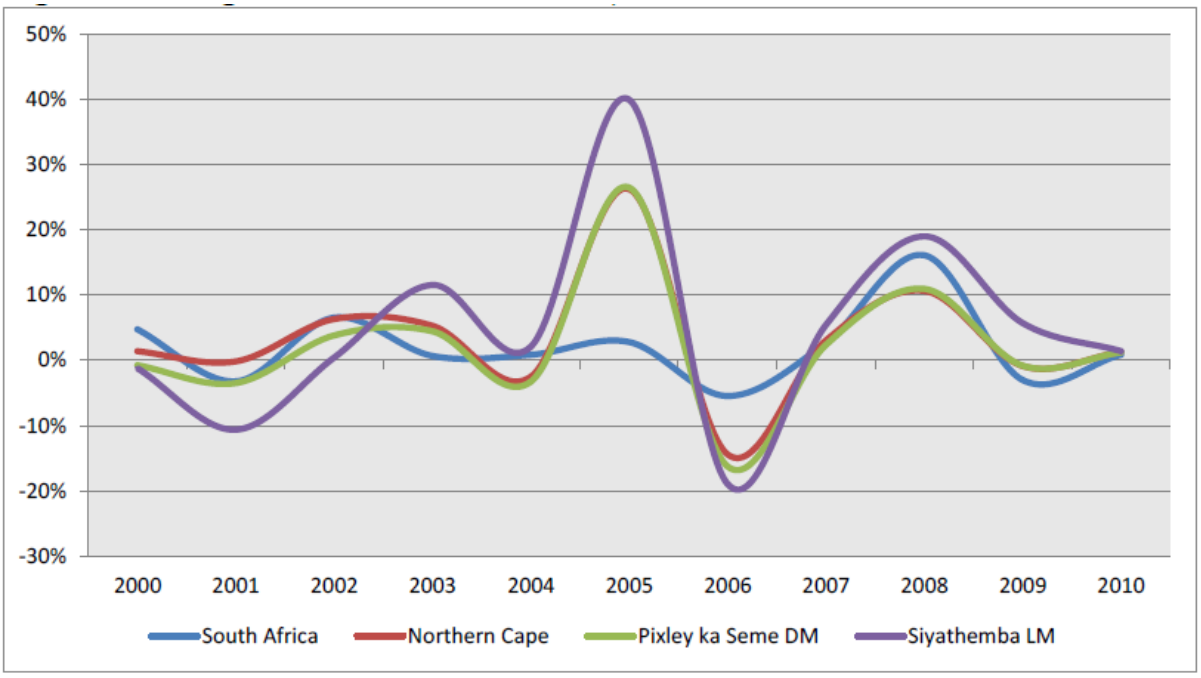
5.8.4.1 Agriculture Sector

The Orange River runs through the Municipality and provides ideal conditions for irrigation farming in Siyathemba, especially the cultivation of grains and vegetables. The main livestock farming in the Region includes cattle, sheep and goat farming. Game farming also takes place in the area and aids in the development of tourism and hunting activities.

The figure below indicates the Agricultural Production Growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. It is apparent that Siyathemba follows a similar production trend to that of Pixley ka Seme and the Northern Cape Province. The Region experienced extensive agricultural growth from 2006 to 2008.

24 LED Strategy, March 2012

Figure 13: Agriculture Sector Growth



Development Potential

- Crop farming could be significantly expanded if market demand could be improved. This is especially relevant for irrigated production along the Orange River.
- Hydroponic production may be well-suited to the area, due to the warm climate (i.e. energy cost saving for hydroponic projects) and available water.
- Sheep farming could be expanded and beneficiated locally.
- The local beneficiation of crops can provide valuable local revenue.
- Electricity shortages could be alleviated through local production. This could justify investment in a local solar power plant.
- The agricultural sector should be diversified to include higher value products such as essential oils.
- A poultry and broiler project could be implemented as part of an Emerging Farmer Support Programme.
- A piggery project could be introduced as part of an Emerging Farmer Support Programme.
- Game farming in the area could be expanded to bolster the production of meat. This could then be linked to investment in a local abattoir.
- There should be a greater focus on agriculture in Schools to change the perception of young people that farm work is not “prestigious”. It should be instilled that it is better to work on a farm than being unemployed.
- Early Childhood Development Programmes should be made available to farm workers (on farms).

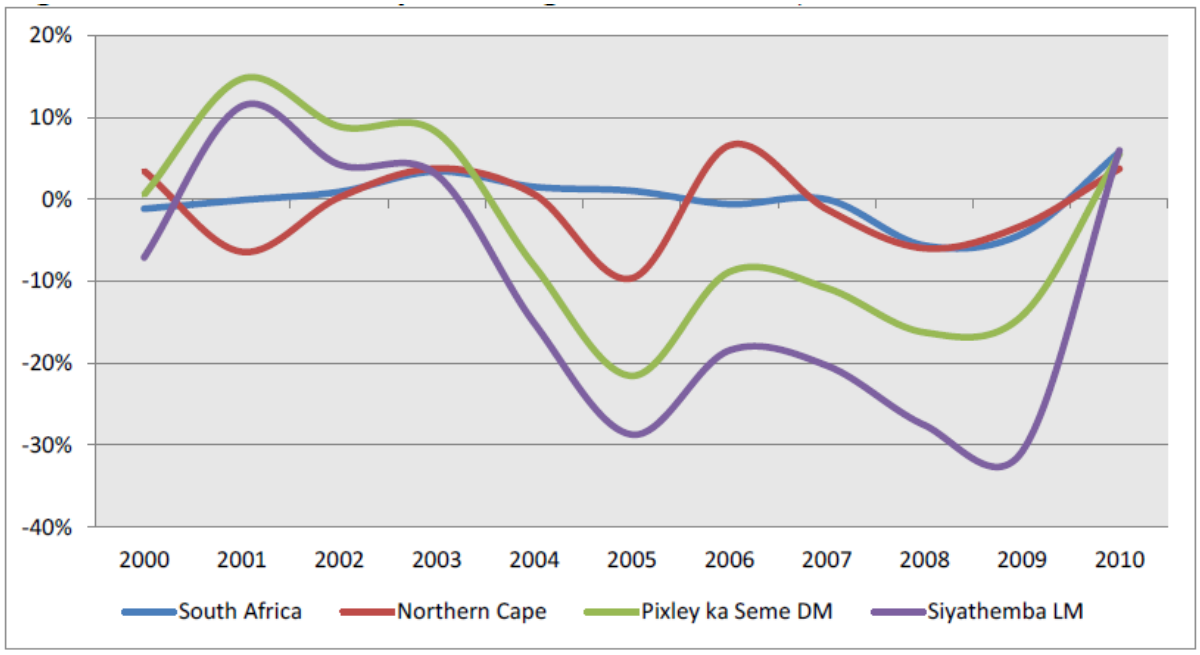
- An Agricultural School or College should be developed in the municipal area to foster skills development in the agricultural sector and retain these skills within the local economy.

5.8.4.2 Mining

The main deposits in Siyathemba include possible alluvial diamond mining along the Orange River, various semi-precious stones, such as tiger-eye and zinc deposits. The Region also has various saltpans for the potential of salt production.

The Figure below indicates the Mining Production Growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. It is evident that Siyathemba follows a slightly lower production trend to that of the Pixley ka Seme District's mining sector from 2000 to 2010.

Figure 14: Mining Sector Growth



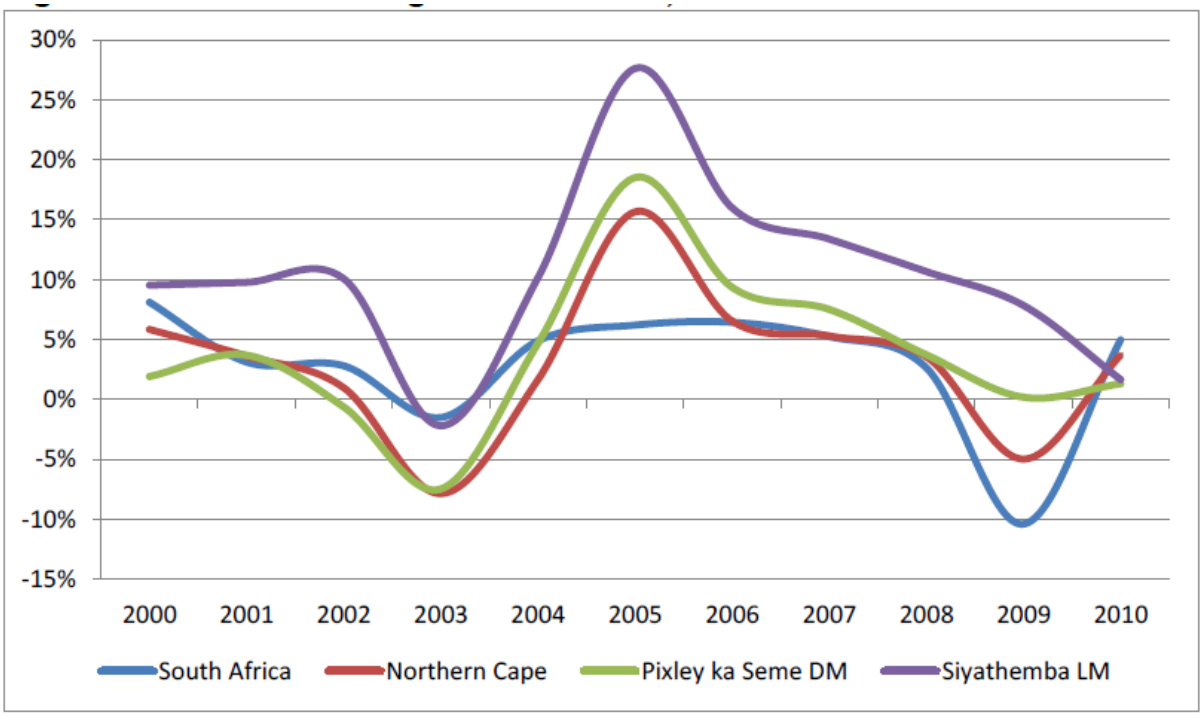
Development Potential

- Semi-precious stones should be commercially mined and locally beneficiated.
- Building sand and clay could be mined throughout the area, especially along the Orange River.
- Locally extracted clay could be used for manufacturing building bricks.
- A local gemstone beneficiation plant can be refurbished and engaged in production again. This pant could be used to cut and polish locally mined semi-precious stones.
- The production and packaging of table salt and salt products is a viable option to gain valuable sources of revenue.

5.8.4.3 Manufacturing

Agro-processing is the main Manufacturing activity in Siyathemba, which consists of the production of various plant and meat products. Figure 3.5 indicates the Manufacturing Production Growth of Siyathemba from 2000 to 2010 as compared with the District, the Province and South Africa. From the Figure below, it is evident that Siyathemba follows a relatively higher production trend to that of the Pixley ka Seme District's manufacturing sector, except for a decline post-2009.

Figure 15: Manufacturing Sector Growth



Development Potential

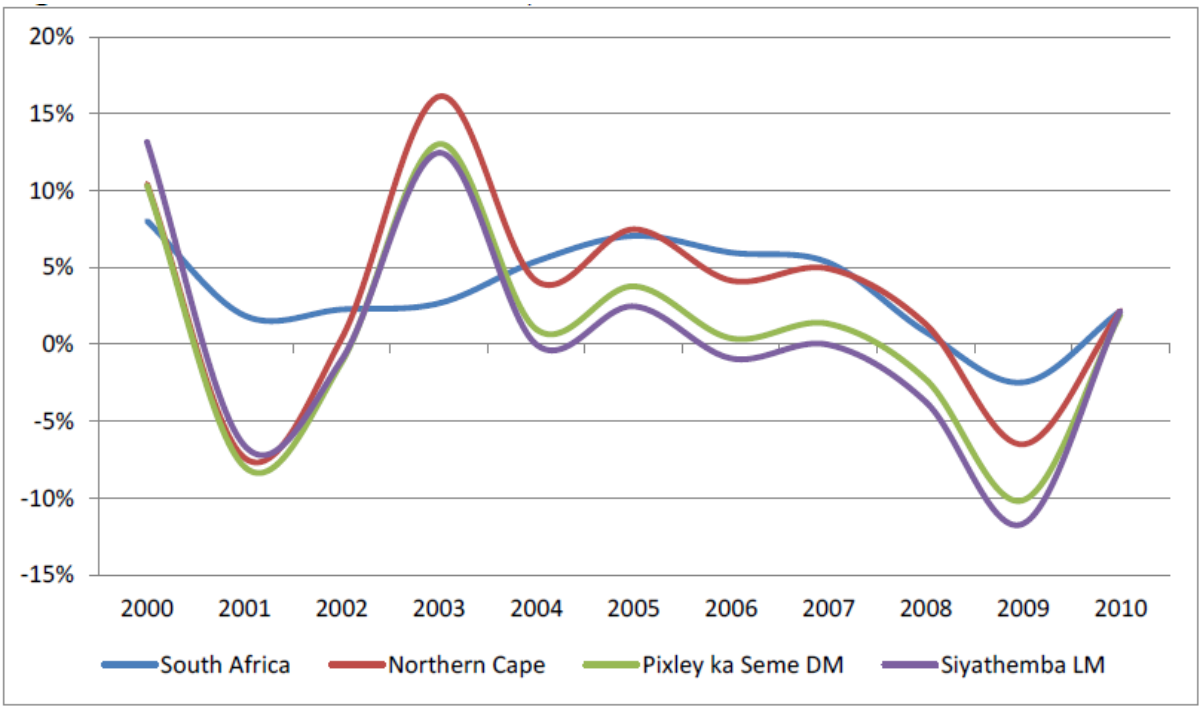
- The opportunity exists to establish an agro-processing plant in Prieska, thereby beneficiating produce from the agriculture sector.
- Investment in a local recycling plant (paper, plastic and glass) provides a good opportunity to expand job creation.
- The implementation of Training and Skills Development Programmes in local communities (focused on the youth).
- The local production of solar panels that could supply the Utilities Sector of the Northern Cape.
- The production of local Arts & Crafts (such as bead work) for the tourism market will provide much needed revenue to the area.
- Investment in a local leather tannery, cotton gin, game abattoir and a chicken broiler house will provide opportunities for beneficiation of agricultural produce.

- 7. Investment in a construction equipment plant will expand manufacturing opportunities, as well as provide for skills development in the area.

5.8.4.4 Retail and Wholesale

The Figure below indicates the Wholesale and Retail Trade Sector Production Growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. It is apparent that Siyathemba experienced a slightly lower production trend to that of the Pixley ka Seme District's Trade sector, however the sector showed positive growth in 2010.

Figure 16: Trade Sector Growth



Development Potential

- There may be opportunities to invest in a new small grocery shop and restaurant in Prieska.
- Railway infrastructure should be restored and placed back into operation to reduce the cost of bulk transport.
- Training and registration assistance should be provided to construction workers. This initiative must be aimed at placing these workers in a position where they can operate their own businesses and tender for government contracts.
- Entrepreneurship Training and Development Programmes should be implemented in local communities to facilitate the development of SMMEs.

5.8.4.5 Tourism

The town of Prieska is located on the south bank of the Orange River at the foot of the Doringberg. It was originally named Prieskap, a Khoisan word meaning „"lace of the lost she-goat". The site of

the town, founded in 1882 and renowned for its semiprecious stones, was a fording place used by early travellers.

The following are the main tourism attractions in the Region:

- 1. Die Bos Nature Reserve
- 2. British Fort
- 3. Green Valley Nuts
- 4. The Oranjezicht and The "Keikamspoort Hiking Trails
- 5. Khoisan Rock Art
- 6. Memorial Garden
- 7. Prieska Museum
- 8. Ria Huysamen Aloe Garden
- 9. Schumann Rock Collection
- 10. Wonderdraai Island

Development Potential

- Resort and adventure tourism along the Orange River will result in enticing tourists to explore the Region for longer and staying for lengthier periods of time.
- The "Die Bos" area could be developed into a tourism resort with associated adventure tourism activities, such as water sports and hiking.
- Expanding the game tourism and hunting industry can enhance the eco-tourism profile of the Region.
- Mineral processing tourism can become an inviting prospect for visitors. If the old gemstone processing plant can be renovated, it could also become a popular tourist destination.
- A local attraction known as "Die Koppie" could facilitate local festivals.
- The area should develop a unique tourism brand of its own and marketed on various platforms.
- Investment in a new casino near Prieska may attract travelers from all over.
- The re-routing of the N10 highway through Prieska will provide tourists the opportunity to appreciate the town and view it as a stop-over or destination on its own.

5.8.5 JOB CREATION AND ANCHOR DEVELOPMENT INITIATIVES BY THE LM

5.8.5.1 Local Economic Development Key projects

a. The Bos Development

The turn-around and rejuvenation of the "Die Bos" Holiday Resort in Prieska have been identified by the Siyathemba Municipality as a priority project for tourism development in the Northern Cape Province. This is an important development initiative to the Municipality as one of its mandates to utilise our municipal assets as a catalyst for economic development and growth.

The focus of this development initiative includes four different properties which border each other. All four properties are situated in the town of Prieska. These entail areas like [1] Die Bos Holiday Resort situated on the bank of the Orange River, [2] Prieska Golf Course, [3] Die Koppie Nature Garden, and the [4] the Municipal Settling Ponds. For the purpose of the feasibility study, the four properties should be viewed as one entity to be considered for further development. All four properties belong to the Siyathemba Municipality.

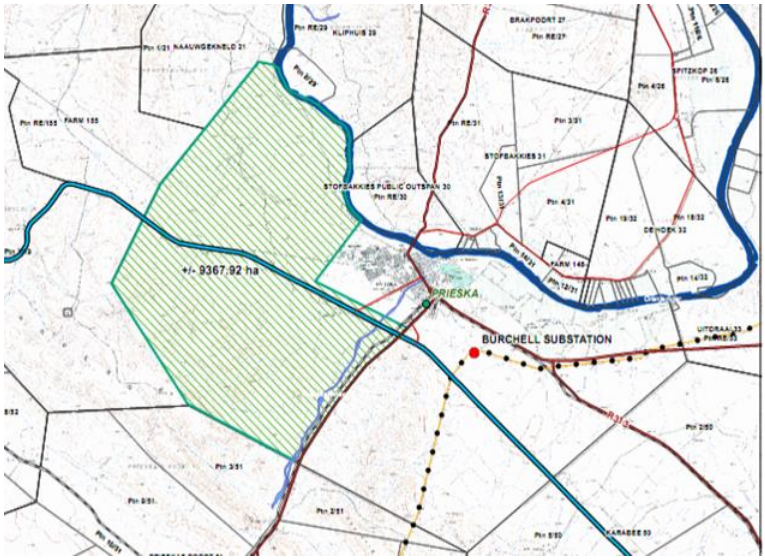
The Siyathemba Municipality believes that additional and large projects like the international SKA, the Renewable Energy boom (Solar Park and IPP's) that's coming; a potential Industrial Zone Development and new Secondary Industry Development projects will have a major boost on the proposed "Die Bos" development project.

A new Feasibility Study Objective will be to:

- Consider the initial feasibility study findings and analysis the original business impressions.
- Determine the market demand and advice the Municipality on Innovative and Commercial foci like an integrated golf estate development combined with business that can draw huge numbers; e.g. a casino, etc.
- Identify additional and stimulating segments to ensure the commercial success of the project.
- Propose creative but sustainable cultural and arcade improvement initiatives to the benefit of both the municipality, the public at large and the business communities.
- Develop practical ways to develop and upgrade, refurbish, rehabilitate, and to maintain the existing facilities.

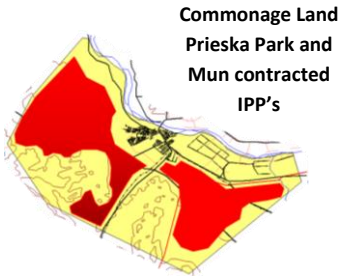
- Propose optimal consideration and enhancement of fauna, flora and aquatic features; like constructing a weir in the Orange River to enhance the landscape, suggested commerce and nature preserve.
- Propose a vibrant marketing tool as branding medium for both the resort and the municipality.
- Propose an integrated development approach taking into consideration the new and upcoming developments.
- Consider the provincial and national tourism strategies and trends.
- Compilation of locality Maps and Artists Impression.
- Propose an appropriate management, maintenance and operational model for the resort to ensure sustainability.
- Ensure public buy-in and create jobs and business opportunities for the local community.

b. Solar Energy Project

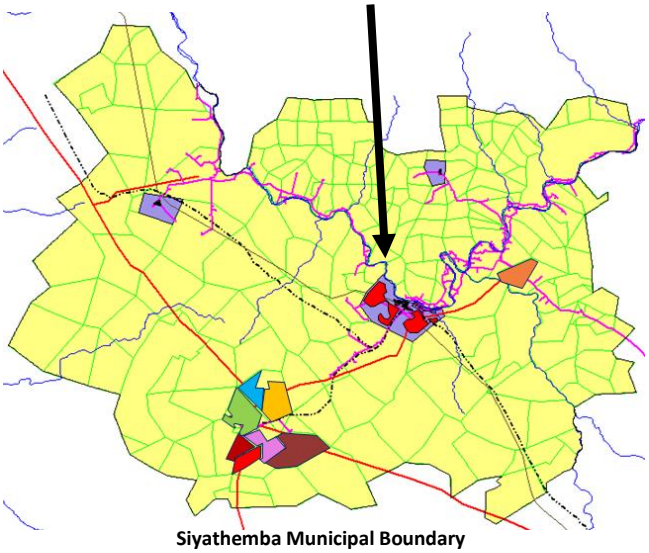


The Siyathemba LM identified Alternative Energy Development as an Anchor economic activity. The Siyathemba Council signed an MOU with the Department of Energy for a 5 000ha of Commonage Land to develop a Prieska Solar Park to initially generate 1 GW of Solar Energy into the Eskom Grid with the possible expansion if the space permits utilising variety of technologies. The "**Proposed Land**" has to be identified from Erf 01 in Prieska and/or alternatively on Erf 260 in Marydale on the communal Land. Council permitted the Mayor and the then Acting Municipal Manager to **Sign the MOU** and then to conclude with a complementary round of Community Participation with the Minister as it were on the 20th of October 2012. It is also necessary to note that the Council also declared its municipal area as a **Nodal Point** for growth to participate and develop in the proposed Solar Park and Secondary Stream Developments to enhance poverty and unemployment reduction. The studies for this proposed Solar Park has started and should the Steering Committees be ready with a Draft Concept by August 2013.

Before Council signed an agreement with the DoE to develop a Prieska Solar Park Council already contracted three Solar Investors. These IPP Contractors are Chameral Property Development, Khweza Powers and Maxwell Moss and Associates for 1095, 60 and 363 ha's consecutively. All four contracts add up to 6 518Ha of Commonage land. MMA is the only company with an optional PPA Contract.



Their contracts provides for an interim rental fee whilst they applying for their permits with a permanent rental fee once the permits get issued. Council later agreed to sign Amendments to their Lease Agreements in order to bring their Contracts in line with expectations as requested by the Nersa and Eskom PPA application requirements. We also allowed them to register those agreements against our Title Deed with the office of the Surveyor General and we gave them permission to sub-lease for financial security with their Investors.



Besides the four Municipal Contracts keen interest is shown by Independent Power Producers (IPP) between the Prieska and Copperton areas on private land to the extent of 1.18GW, Mulilo is the first company who has been allocated a permit for 19.5MW during the second bidding phase. The rest of the IPP Contractors are preparing themselves for bidding in the third and fourth rounds.

Herewith a list of all interested Companies:

Company	Farm	Technology
Mainstream	Mierdam 1	PV
	Mierdam 2	Wind
	Platsjambok 1	PV
	Platsjambok 2	Wind
Mulilo	Vogelstruisbult	PV
	Hoekplaas	PV
	Klipgats	PV
Juwi	Nelspoortjie	Wind
Jouren	Holsloot	PV
Dept of Energy	Siyathemba Mun	Mix
Chameral Prop Dev	Siyathemba Mun	PV

Maxwell Moss and Associates	Siyathemba Mun	PV
Khweza Power	Siyathemba Mun	PV
Plan 8	ModderPan	PV
	2 180 MW	

Regular consultation at Council Imbizo's and Ward Committee meetings is taking place to inform and prepare the communities about these developments. Discussions and negotiations around the required Solar Development Trusts are underway. The entire project will entail a Solar Park and almost 8 to 12 IPP Power Producers. Our Municipality can only negotiated for the compulsory social and labor arrangement as well as for the employment and smme opportunities with them.

The Municipal Council are in discussions with a number of Companies because of the latter developments to lease land for manufacturing, agricultural, mining, housing and tourism related developments as part of our Secondary Industry Development plans.
These initiatives propel the Council to urgently look at enhancing our own technical capacity and strategic planning like;

- Spatial Development Framework
- Roads, works and storm water master planning
- Water and Sanitation master plan
- Electricity and Energy Infrastructure and Distribution
- Civil Engineering and Design
- IT Hub and Technology Development
- Physical and Cyber Security Planning

The following are pressing challenges in pursuit of our developmental goals;

- Non-disclosure of bidding information by IPP contractors
- Lack of regulations in relation to leases and wages
- Absence of a single coherent approach to the question of community benefit (Community Trusts)
- Slow Eskom Grid development can delay the implementation of national targets
- Historical infrastructural backlog
- Ailing electricity network
- Two thirds of household electricity supply serviced by Eskom in Municipal areas
- Low Skills shortages and Literacy Levels
- Absence of disaster management unit
- Huge housing backlog
- High unemployment
- HIV / AIDS and TB
- Asbestoses
- Sanitation with Water Distribution Challenges
- Limited Municipal resources
- Absence of strategic planning
- Engineering Surveys and Strategic Planning Capacity

Opportunities

- Renewable Energy Development
- A Single and all-encompassing Trust for all IPP Contractors
- Siyathemba a Gateway to SKA opportunities
- Underutilised prime agricultural land and Agro processing
- Sufficient water with rights and water extraction abilities
- Untapped Mining Development and Value adding
- Secondary Industry Development opportunities
- Aquaculture
- Sufficient land for multi Industry development
- Enterprise Development
- Tourism Development
- Sound economic development plan
- Enhance local community economic development benefit
- Require planning capacity development
- Infrastructure Development
- Training - The Siyathemba Municipality have appointed a serves provider to pursue and implement its Siyathemba Integrated Education and Skills Development Initiative (SIESDi).

c. Aqua – Commercial Fish Farming Project by the DTi

The DTI and Pixley Ka Seme DM intend to put up Fish Dams for Fish Farming purposes on the Orange River. Aqua Eco have subsequently developed a feasibility study for the DTi on behalf of the Pixley Ka Seme DM and their findings suggest Prieska should be the site for the pilot project. This study included all the municipalities on the banks of the Orange River. The Siyathemba Municipality was identified as ideal for the pilot project provided.

A feasibility study prepared by AquaEco guided the DTI and the Pixley Ka Seme District Municipality on whether it is economically viable to establish a pilot aquaculture enterprise in Prieska. The study determines fish species/crops that could be farmed in these areas and the associated market feasibility. Prieska based on the outcome of the feasibility studies on certain parts of the Orange River and on the wastewater treatment plants within the municipal jurisdiction of the Pixley ka Seme District Municipality is deemed favourable, a complimentary business plans will be compiled.

The objectives of the assessment were:

- To determine whether it is feasible to set up a community based aquaculture enterprise in Prieska.
- To investigate the possibility of including hydroponics farming linked to the aquaculture enterprise.
- To determine the kind of fish species that will be suitable for the areas given the Northern Cape climate.
- To advise on the kind of crops that could be planted in association with the fish farming activities
- To identify the best possible form of a business model that should be used in the implementation of such an enterprise
- To develop a business plan or make recommendations to investigate other enterprise possibilities.

d. SKA Strategic position outside the Demarcated Area

The SKA will be a revolutionary radio telescope made of thousands of receivers linked together across an area the size of a continent. The total collecting area of all the SKA receivers combined will be approximately one square kilometer, making the SKA the largest and most sensitive radio telescope ever built. South Africa has submitted a bid to host the €1.5-billion Square Kilometer Array (SKA). South Africa, allied with eight other African countries, is competing against Australia (allied with New Zealand) to host the SKA, an instrument 50-100 times more sensitive and 10 000 times faster than any radio imaging telescope yet built.

The SKA will give astronomers insight into the formation and evolution of the first stars and galaxies after the Big Bang, the role of cosmic magnetism, the nature of gravity and possibly life beyond Earth. If history is any guide, the SKA will make many more discoveries than we can imagine today.

Industry participation with the SKA offers the potential for involvement across a range of engineering and computing disciplines. The SKA expects to collaborate with a variety of industry partners, including niche R&D companies, followed by increasing engagement through commercial contracts with high-volume manufacturers, technology

systems vendors, site services and installation firms, and power and data transmission specialists. Industry will play a crucial role in the delivery and through - life support of the SKA technologies and infrastructure. The scale of the SKA, and the need to mass produce components, requires industry engagement on a scale unprecedented in radio astronomy. The

involvement of organizations with experience and expertise in delivering demanding technological specifications within a production cost envelope will be essential.

The technology types to be set up by this Project is highly sensitive and will not allow any mayor economic and signal developments within a certain core field hence the opportunity for secondary industries to be develop on the outskirts of their footprint actions. The Siyathemba municipal area with De Aar and Upington falls just outside this area and offers the ideal platform for business opportunities if they can make the most out of it.

The Siyathemba LM has also identified the possible economic spin-offs from being strategically positioned just outside the demarcated area of the SKA Area. Prieska will therefore be in a position to benefit from major industrial and economic activity which will NOT be allowed or possible within the SKA demarcated area for NO or LOW industrial activity and communication.

As a neighboring municipality we can compete for opportunities along the following lines;

- Water from the Orange River with a current 56% underutilized purification works of about 15 000kl/24hr.
- A water pipe line that exist and run for approximately 70km towards the same direction, as designed and erected for the water supply to the then Copperton as a Copper mine.
- Good but underutilized rail and road networks that exist to serve these areas.
- Food security for this anticipated industries.
- Property development.
- Appropriate recycling.
- Contracts with high-volume manufacturers.
- Site services and Installation firms.

We intend to involve ourselves as a municipality regarding this project and we are slowly putting mechanisms in place to act once the project is geared. Council took a decision and called upon management to seize the moment.

Local Economic Development (LED) is an approach to sustainable economic development that encourages residents of local communities to work together to stimulate local economic activity that will result in, inter alia, an improvement in the quality of life for all in the local community.

5.8.6 CHALLENGES

1. An LED strategy has been developed and was approved by council during 2012. Activity plans then needs to be developed to implement the recommendations made in this strategy.
2. The municipality have identified 3 Anker project for economic development, but no project execution plans exist for these initiatives.

6 STRATEGIES

6.1 SERVICE DELIVERY AND INFRASTRUCTURE DEVELOPMENT

Strategic Objective	Intended Outcome	Strategies	Proposed high level initiatives
Sustainable, effective and efficient service delivery to all people in the municipal area	Sustainable delivery of improved services to all households	Development of relevant planning and strategic documents to guide service delivery and infrastructure development.	▪ Approval of the WSDP ▪ Development of a Sanitation Master plan ▪ Development of O&M plans to plan and structure proactive and reactive maintenance of infrastructure ▪ Update of the Energy master plan ▪ Development of a Transport plan ▪ Development of a Storm water management plan ▪ Finalise the Housing Action Plan ▪ Development of a Disaster management plan. ▪ Development of a Spatial development framework ▪ Development of a Commonage land management plan ▪ Development of an action plan to roll out services to farm areas ▪ Initiate discussions with Dept of Health with regards to the proposed Community Health Facility in Prieska.
		Ensure that bulk resources and services are sufficient to support internal service delivery.	▪ Bulk water supply studies in Niekerkshoop and Marydale. ▪ Upgrading of wastewater treatments works
		Ensure that all people in	▪ Addressing the water

Strategic Objective	Intended Outcome	Strategies	Proposed high level initiatives
		the jurisdiction area have access to basic services by 2014.	backlog in all 3 towns. ▪ Addressing the sanitation backlog in all 3 towns. ▪ Implementation of internal reticulation/services projects ▪ Expand refuse removal services to all areas in the municipal area ▪ Complete public lighting projects ▪ Implementation of housing projects ▪ Development of an action plan for the Koegas relocation project ▪ Finalisation of the cemeteries projects
		Improve water, wastewater and solid waste management	▪ Finalisation of the Water Safety/Risk Plan ▪ Finalisation of the Wastewater risk abatement plan ▪ Development of rectification/action plans based on the recommendations of the Risk plans (water, wastewater and solid waste).

6.2 PUBLIC PARTICIPATION AND GOOD GOVERNANCE

Strategic Objective	Intended Outcome	Strategies	Proposed initiatives
Promote a culture of participatory and good governance	Entrenched culture of accountability and good governance	To ensure that all required governance structures are established and operational according to the relevant legislation.	▪ Support the internal audit function which is executed by the district. ▪ Establishment of the Audit committee. ▪ Implementation of the MPAC as prescribed in

Strategic Objective	Intended Outcome	Strategies	Proposed initiatives
			the adopted guideline document. ▪ Revisit the structure of the ward committees to ensure good representation of the entire area. ▪ Maintain the operations of the current supply chain committees whilst the SCM unit are put in place.
		To ensure that the relevant management and operational systems are in place and rolled out.	▪ Development of a structured compliant management system. ▪ Implementation of the Fraud management plan. ▪ Improve the quality of the quarterly Newsletter as well as broaden the distribution area thereof. ▪ Development of an activity plan for the Library Development Fund.

6.3 INSTITUTIONAL DEVELOPMENT AND TRANSFORMATION

Strategic Objective	Intended Outcome	Strategies	Proposed initiatives
Improve organisational cohesion and effectiveness	Improved organisational stability and sustainability	To ensure proper human resource management and enhance effective and efficient administration systems.	▪ Approval and implementation of the revised organogram. ▪ Recruitment of suitable candidates to fill vacant posts ▪ Roll out of the Performance management system ▪ Execution of the Skills Development Plan

6.4 FINANCIAL VIABILITY

Strategic Objective	Intended Outcome	Strategies	Proposed initiatives
To improve overall financial management by developing and implementing appropriate financial management policies, procedures and systems	Improved financial management and accountability	Development practices of sound, conservative budgeting aimed at enhancing financial resources through maximised revenue collection and controlling costs to the minimum necessary expenditure.	▪ The employment of 6 interns to assist within the Supply Chain Management Unit as well as to be capacitated in the operations of the financial division of the Municipality. ▪ Initiative Valuation Roll ▪ Maintenance of operating systems e.g. TGIS and Sabata ▪ Operation Clean Audit ▪ Proper financial viability study ▪ Replacement of Plessey electricity meters with Conlog meters ▪ Execute Phase 2 of the Asset management programme ▪ Revision of tarrif structure

6.5 LOCAL ECONOMIC DEVELOPMENT

Strategic Objective	Intended Outcome	Strategies	Proposed initiatives
Create an environment that promotes the development of the local economy and facilitate job creation	Improved municipal economic viability	Unlock LED opportunities according to the LED strategy	▪ Pursue Implementation of the LED strategy ▪ Development of an action plan (with priorities) to execute the recommendations made in the strategy. ▪ Develop Project execution plans for the Anker development projects

Siyathemba Local Municipality

Local Economic Development Strategy

March 2012

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Section 1: Introduction

1.1. Background

Local Economic Development (LED) is an approach to sustainable economic development that encourages residents of local communities to work together to stimulate local economic activity that will result in, inter alia, an improvement in the quality of life for all in the local community.

The Department of Economic Development and Tourism in the Northern Cape has recently concluded the development of its Provincial LED Strategy in line with the Northern Cape Growth and Development Strategy. These Strategies provide the foundation for Integrated Economic Development Planning throughout the Northern Cape. To provide the necessary implementation impetus at the local level, the Siyathemba Local Municipality embarked on a process of developing its own LED Strategy in line with provincial planning imperatives.

1.2. The LED Vision for Development

The Municipality convened a community and LED role player Visioning Workshop on the 16th of September 2011. During this workshop, participants highlighted the following main visioning elements:

1. Sustainability
2. Locally owned economy
3. Local value-adding and social upliftment
4. Integrated community development

These elements were then discussed and finally packaged into the following Vision Statement:

"Ensuring long term economic sustainability through local value addition and social upliftment, as well as integrated community development. We strive towards an economy owned by local people."

This vision for Local Economic Development sets the tone for the study, provides guidance for analysis and informs the outcomes or recommendation of the Strategy.

1.3. The Purpose and Objectives of the Study

The purpose of local economic development (LED) is to build up the economic capacity of a local area to improve its economic future and the quality of life for all. It is a process by which public, business and nongovernmental sector partners work collectively to create better conditions for economic growth and employment generation to advance the economic identity, based on a local competitive and comparative economic profile.

The aim of the Siyathemba LED Strategy is to build horizontal planning and development consensus among the Local Municipality, local businesses and civil society towards building the local economy together through a shared vision. The LED Strategy will also facilitate vertical integration between local and other spheres of government to facilitate proper regional planning alignment and development coordination in the District and Province. The LED Strategy will focus on enhancing competitiveness and increasing sustainable growth while ensuring that this growth is inclusive.

The main objectives for the study have been identified as:

1. Defining LED in the context of the Siyathemba Local Municipality.
2. To develop a LED Development Framework and Strategy for the Municipality.
3. Broadly assessing the provision for LED within the municipal area and more specifically, the institutional infrastructure and programmes available to implement LED initiatives.
4. Broadly identifying economic opportunities across the Municipal area.
5. A proposed Implementation Plan to address gaps and solutions that contribute to a more coherent and coordinated LED approach.

The challenge of the project is to understand the current economic development imperatives of the Siyathemba Local Municipality, within the context of the regional and larger economy, as well as to understand the current institutional arrangements that support local economic development.

In this context the goal of the study has been formulated as follows:

To formulate a LED Strategy for the Siyathemba Local Municipality aimed at enhancing competitiveness, information dissemination, investment facilitation and trade promotion and interpret and package this as a practical implementation strategy to guide investment and trade development in line with the LED Vision and Objectives.

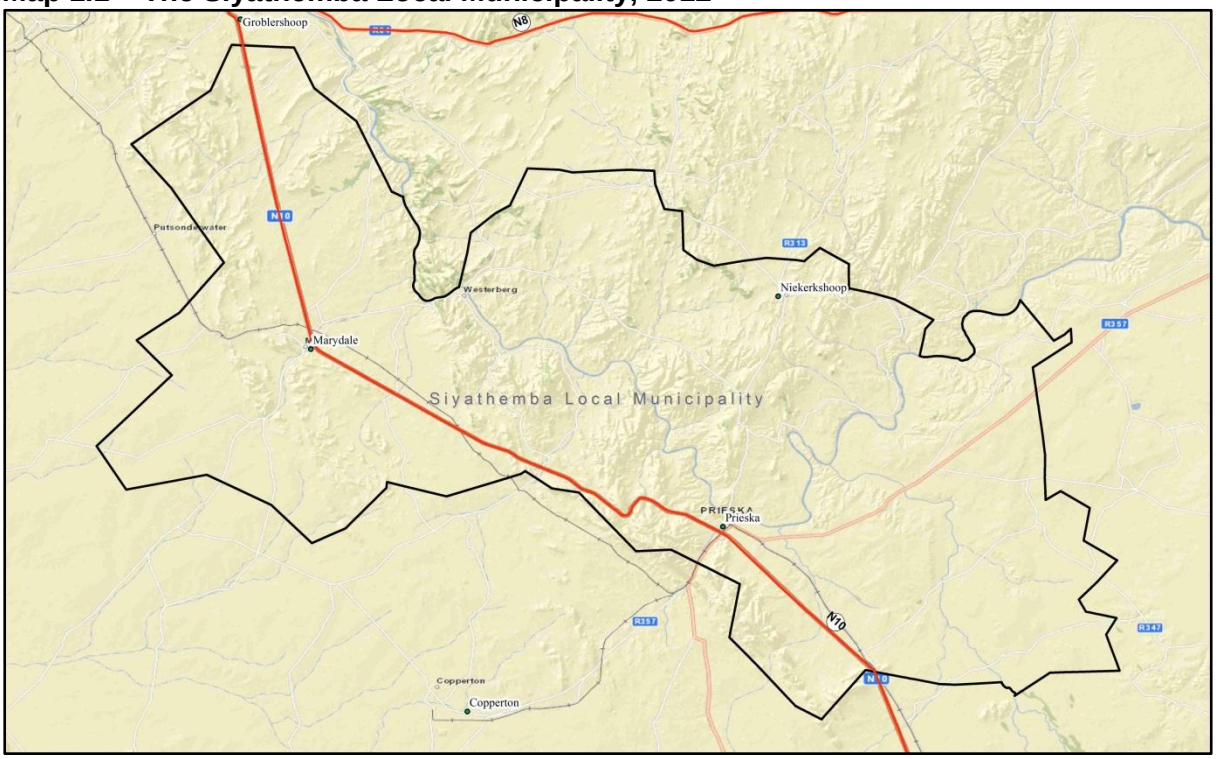
1.4. Geographic Context

1.4.1. Siyathemba in Local Context

Map 1.1 depicts the Siyathemba local municipal boundary. From this map it is evident that the municipal area includes the following main towns:

- Prieska (the seat of the Local Municipality)
- Marydale
- Niekerkshoop

Map 1.1 – The Siyathemba Local Municipality, 2012



Source: Boundary data provided by the Municipal Demarcation Board, 2012

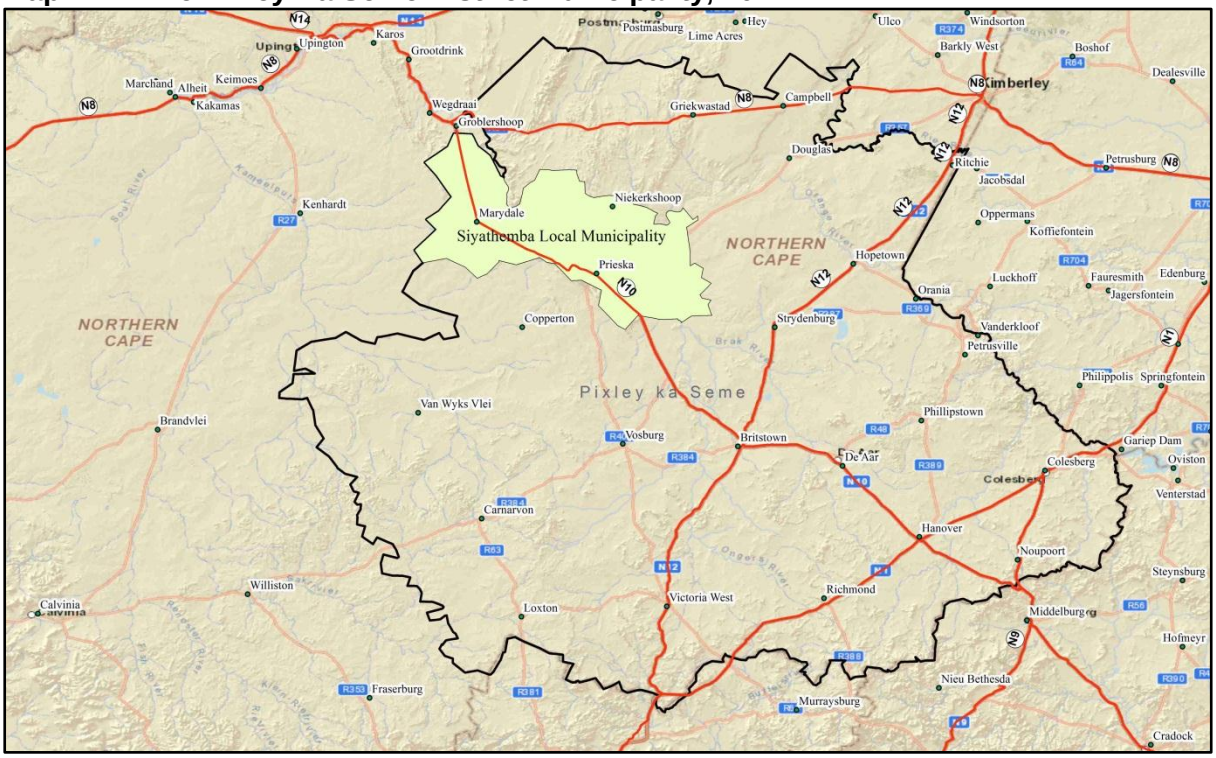
The municipal area encompasses a geographic area of some 8,197 km^2 which implies that Siyathemba accounts for some 8.0% of the total District surface area. The local economy is mainly agriculture based and highly dependent on the Orange River, which flows through the area.

1.4.2. Siyathemba in Regional Context

Siyathemba is one of eight Local Municipalities in the Pixley Ka Seme District. The other seven Municipalities are:

1. Thembelihle Local Municipality
2. Emthanjeni Local Municipality
3. Siyancuma Local Municipality
4. Umsobomvu Local Municipality
5. Ubuntu Local Municipality
6. Kareeberg Local Municipality
7. Renosterberg Local Municipality

Map 1.2 – The Pixley Ka Seme District Municipality, 2012



Source: Boundary data provided by the Municipal Demarcation Board, 2011

De Aar is the seat of the Pixley Ka Seme District Municipality (located in the Emthanjeni LM). Prieska is located some 182 km from De Aar and 236 km from Kimberley. Spatially, Siyathemba is very distant from South Africa's largest consumer markets. In this regard, the road transport distances illustrated by Table 1.1 would apply to LED initiatives.

Table 1.1 – Transport Distances from Siyathemba

City	Distance from Prieska (km)
Upington	249
De Aar	182
Kimberley	236
Bloemfontein	397
Cape Town	835
Johannesburg	714
Pretoria	775
Durban	1029

Section 2: Situational Analysis

The purpose of this Section is to describe the current reality of the area in the context of the larger region, Northern Cape and South Africa. The situational analysis forms the basis for the LED Strategy and sets the point of departure.

In order to plan for Local Economic Development, a good understanding of the economic base, markets and how the local economy functions is vital. The situational analysis investigates the economic and socio-economic trends of Siyathemba and provides base data to identify and prioritise important issues for consideration in the LED planning process. This facilitates an understanding of local resources, local businesses, what they produce, where businesses' inputs come from, the marketplace, etc.

2.1. Demographic Profile

The local population of an area and its socio-economic implications lie at the root of the need for LED planning and decision making by both government and the private sector. In the strategic planning process this information informs forecasting and scenario development towards potential future outcomes.

This sub-section intends to provide basic data on the local population in regional and national context. Population growth trends will be illustrated to enable the study team to plan for adverse situations, explore opportunities and to extrapolate the future. Local communities form an integral part of the local economy. They are the primary source of labour and entrepreneurship for economic growth and also the consumers of local products and services. It is thus vital to analyse demographic indicators to provide the proper context for socio-economic and economic realities as well as for strategic planning.

2.1.1. The Population

The local and regional population is illustrated by Table 2.1. From this Table, it is evident that Siyathemba had a local population of just more than 21,000 people during 2010.

Table 2.1 – The Local and Regional Population

Region	2004	2006	2008	2010
South Africa	46,745,940	47,827,370	48,911,245	49,991,472
Northern Cape	1,088,672	1,089,227	1,093,823	1,103,918
Pixley Ka Seme	190,396	185,334	180,082	179,507
Siyathemba Local Municipality	21,441	21,312	21,239	21,333

Source: Quantec Research, 2012

In regional context, this meant that Siyathemba contributed 11.9% to the District population (i.e. the second largest LM in the District by population) and 1.9% to the population of the Northern Cape.

Figure 2.1 – The Siyathemba Population Age & Gender Profile, 2000 & 2010

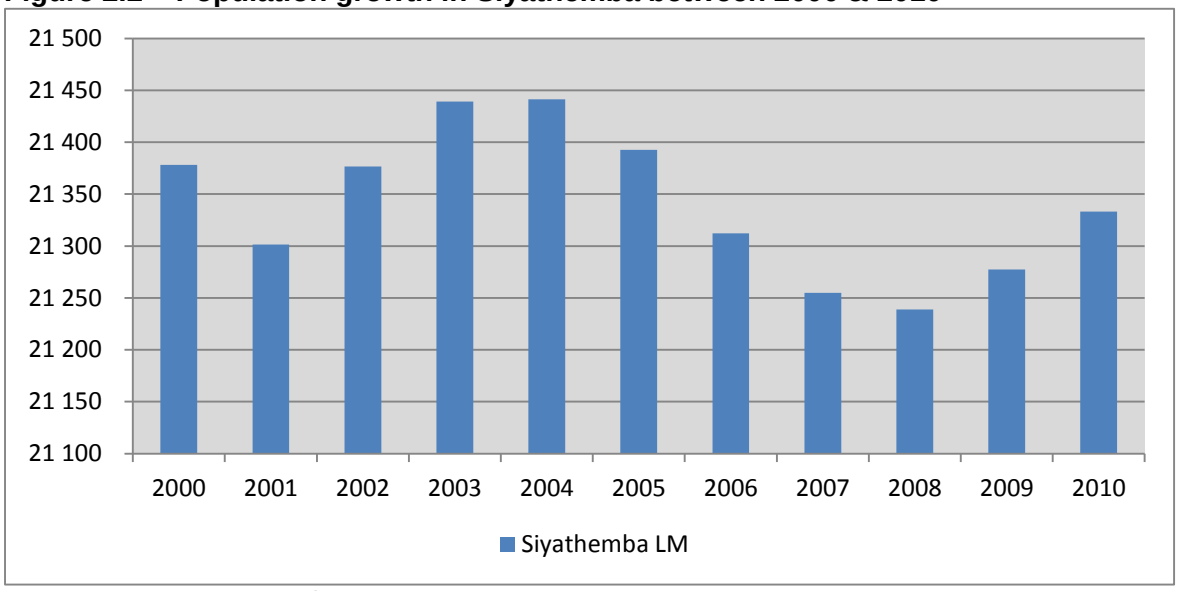
Source: Quantec Research, 2012

The Age & Gender Profile of the local population is illustrated by Figure 2.1. With regards to this profile, the following observations were made:

1. There were slightly more females (51.4%) than males (48.6%) among the local population during 2010. It was, however, noted that the population became slightly less female dominant since 2000 when 52.4% of the population were female.
2. The working age group (15 to 64) contributed 64.4% to the local population in 2010. This age group has increased proportionately (from 58.6% to 64.4%) in relation to the other age groups. Since 2000 this group increased by approximately 1,210 people.
3. The working age population is slightly male dominant. Since 2000, male working age population increased by around 928 men in absolute terms, while the number of women increased by about 282.
4. The age dependency ratio declined from 0.7 in 2000 to 0.6 dependents (children & the elderly) in 2010 for every working age adult.
5. Since 2000, the proportion of children under the age of 15 declined by 6.7%. This means that the age profile of the local population is becoming older. The number of children in the area also declined from around 14,700 during 2000 to just above 12,000 in 2010.

The population of Siyathemba declined from just over 21,370 people in 2000 to about 21,330 in 2010 (see Figure 2.2). This implies that the population contracted by 0.4% on average per annum. This growth rate is slightly lower in the Pixley Ka Seme DM, which contracted 0.7% p.a. The decline of the Siyathemba population was mainly driven by lower fertility rates.

Figure 2.2 – Population growth in Siyathemba between 2000 & 2010



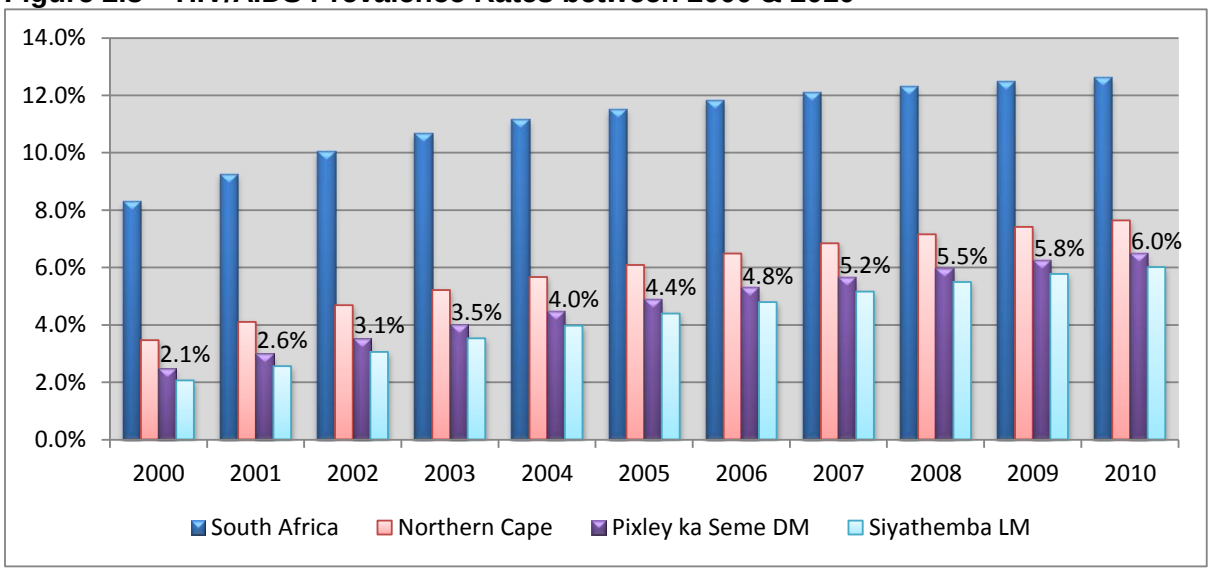
Source: Quantec Research, 2012

The death rate (i.e. the number of deaths per 1,000 people in year) experienced a relative increase from 11.2 deaths per 1,000 people in 1995 to 11.6 during 2010. During 2010, the death rate for Pixley Ka Seme was 11.9 deaths per 1,000 people, while it was 13 for the Northern Cape and 16.4 for the South African population. The reason for the lower death rate in the study area was mainly the result of lower HIV/AIDS prevalence rates when compared with South African averages.

2.1.2. HIV/AIDS Prevalence

The prevalence rate for HIV/AIDS in South Africa, the study area and the region is illustrated by Figure 2.3. During 2010, the HIV/AIDS prevalence rate of the Siyathemba population was 6.0% compared to the District rate of 6.5%. These rates compared well to the Northern Cape (7.6%) and South African (12.6%) averages in the same year.

Figure 2.3 – HIV/AIDS Prevalence Rates between 2000 & 2010



Source: Actuarial Society of South Africa, 2012

Since 2000, the number of people living with HIV/AIDS in the Siyathemba municipal area more than doubled from about 400 to just over 1,200 people in 2010. This means that while the local population compares well with South African averages (in terms of HIV/AIDS), the prevalence rate is expanding faster in Siyathemba (at 11.2% p.a.) when compared with South Africa (at 5.5% on average per annum since 2000).

2.2. Socio-Economic Profile

2.2.1. Adult Education

The levels of adult education (persons older than twenty years) in Siyathemba and the larger region are illustrated by Table 2.2. From this Table, it is evident that 14.2% of local adults did not complete any type of formal education whatsoever. This observation is relatively higher than the Provincial and National averages.

Table 2.2 – The levels of Adult Education in Siyathemba and the larger region, 2010

Level of Adult Education	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Grade 0/No schooling	10.8%	12.7%	18.6%	14.2%
Grade 1/Sub A	1.3%	1.3%	1.7%	1.2%
Grade 2/Sub B	1.9%	1.9%	2.5%	2.8%
Grade 3/Standard 1	2.5%	3.0%	3.7%	3.3%
Grade 4/Standard 2	3.1%	3.9%	4.0%	4.1%
Grade 5/Standard 3	3.3%	4.4%	5.4%	5.5%
Grade 6/Standard 4	4.2%	5.7%	5.4%	6.6%
Grade 7/Standard 5	5.7%	7.3%	7.6%	10.2%
Grade 8/Standard 6/Form 1	7.0%	8.7%	8.6%	10.9%
Grade 9/Standard 7/Form 2	6.4%	7.0%	6.5%	8.7%
Grade 10/Standard 8/Form 3/NTC1	9.2%	9.8%	8.1%	8.3%
Grade 11/Standard 9/Form 4/NTC11	12.1%	7.2%	5.9%	6.0%
Grade 12/Standard 10/Form 5/Matric/NTC111	19.8%	17.4%	13.4%	9.3%
Less than matric & certif/dip	2.8%	2.3%	2.4%	4.0%
Certificate with Grade 12	2.0%	1.9%	1.7%	0.8%
Diploma with Grade 12	3.3%	2.5%	2.2%	1.8%
Bachelor's Degree	2.2%	1.2%	0.9%	0.5%
Bachelor's Degree and Diploma	1.0%	0.7%	0.9%	1.6%
Honours degree	0.9%	0.6%	0.3%	0.2%
Higher Degree (Master's, Doctorate)	0.7%	0.4%	0.3%	0.1%
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**

Source: Quantec Research, 2012

Adults who live within the Siyathemba municipal area do not compare well with the average for the Northern Cape in terms of adults who obtained a matric certificate. In Siyathemba, around 14% of adults have a matric certificate compared to 19.7% of adults in Pixley Ka Seme and 24.7% in the Northern Cape. In terms of the proportion of adults who obtained a tertiary qualification, Siyathemba (5.1%) was also relatively lower that the District (6.3%) and Northern Cape (7.3%).

The adult education profile of Siyathemba did not improve over the past ten years. Since 2000, the number of adults with a matric certificate decreased from about 1,845 (or 15.3% of the adult population) to around 1,820 in 2010 (i.e. an average decrease of 0.1% per annum). It was also noted that the portion of adults with a tertiary qualification had increased from about 530 in 2000 to around 640 in 2010.

2.2.2. Poverty & Social Needs

2.2.2.1. Household Access to Services

A total of around 5,500 household dwellings were estimated to exist in the Siyathemba municipal area during 2010. This accounted for some 11.7% of all household dwellings in the District, which ranked Siyathemba fourth among Pixley Ka Seme's Local Municipalities. Since 2000, the number of dwellings increased by 0.8% on average per annum compared to 0.1% decline in the District and 0.5% growth in the Province.

Table 2.3 – Household Access to Services, 2000 & 2010

Household Indicator	2000	2010	Access	Growth
House or brick structure	4,303	4,419	81.8%	0.3%
Electricity	4,305	4,812	87.3%	1.1%
Piped Water	5,001	5,356	97.5%	0.7%
Refuse removal	4,066	4,546	83.5%	1.1%
Flush or chemical toilet	3,597	4,323	78.6%	1.9%

Source: Quantec Research, 2012

Table 2.3 illustrates the type of dwellings found in Siyathemba and the level of household access to municipal services. In this regard, the following observations were made:

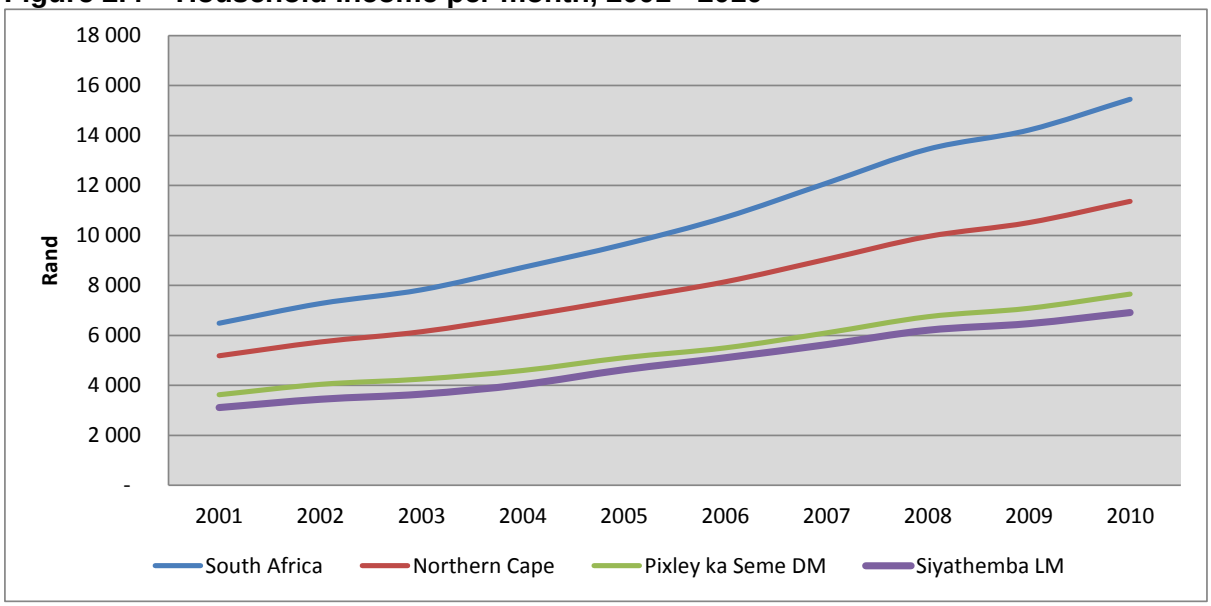
1. More than 81% of household dwellings found in Siyathemba can be classified as houses or brick structures on separate stands. This indicator is slightly higher when compared with the average for Pixley Ka Seme (80.1%) and the Northern Cape (77.4%). Some 8.6% of local dwellings can be described as shacks.
2. Around 87% of household dwellings found in Siyathemba have access to electricity. This indicator is on par with the District and Provincial average.
3. Around 97% of household dwellings found in Siyathemba have access to piped water while the remainder mostly rely on boreholes as a source. The area rated on par in terms of this indicator when compared with Pixley Ka Seme (96.8%) and the Northern Cape (96.2%).
4. Around 83% of local households enjoyed a weekly refuse removal service by the Local Municipality, compared to 76.2% in Pixley Ka Seme and 68.8% in the Northern Cape.
5. Approximately 78.6% of local households have access to flush or chemical toilets. This indicator is relatively higher when compared with the District (67.8%) and Provincial (67.8%) average. Those households that do not have access to flush or chemical toilets, mainly make use of pit latrines as their main source of sanitation.

2.2.2.2. Household Income & Expenditure

Trends in the level of monthly household income are portrayed by Figure 2.4. From this Figure, it is evident that households in Siyathemba experience lower levels of income (on average) when compared with the other regions illustrated in Figure 2.4. During 2010, the average monthly income per household was R6,912 in Siyathemba, relatively lower than the District average of R7,652.

Since 2001, household income has grown by 9.3% on average p.a. in Siyathemba compared to 8.7% in Pixley Ka Seme and 9.1% in the Northern Cape. This means that there is a growing welfare gap between households in Siyathemba and the larger region. Income from sources other than labour remuneration has also been increasing. Such non-remuneration income mostly includes social grants and other forms of transfers. Over the past nine years the monthly non-remuneration income contribution (per household) increased from R994 in 2001 to R1,627 in 2010 (i.e. by 5.6% p.a.). This means that local communities are becoming more dependent on social grants (and other transfers).

Figure 2.4 – Household Income per month, 2001 - 2010



Source: Quantec Research, 2012

From a community development perspective, one should also consider the distribution of income among local households to reflect the gaps between local income levels. A simple average (as indicated by Figure 2.4) may provide a skewed picture of reality if there are a few households that receive incomes that are substantially higher (or lower) than others in an area. From Table 2.4 it is evident that the distribution of income among local households is indeed highly skewed. Around 65% of local households earn less than R3,200 per month and are regarded as poor. In comparison, some 67.8% of households in Pixley Ka Seme and 63.8% in the Northern Cape fall in this category. The largest income group (representing 29.0% of local households) in Siyathemba are households who earn between R1,600 and R3,200 per month. On the other side of the income scale, it can be observed that households who earn more than R12,800 per month only represent 8.0% of households in Siyathemba compared to 7.7% in the District and 9.9% in the Province.

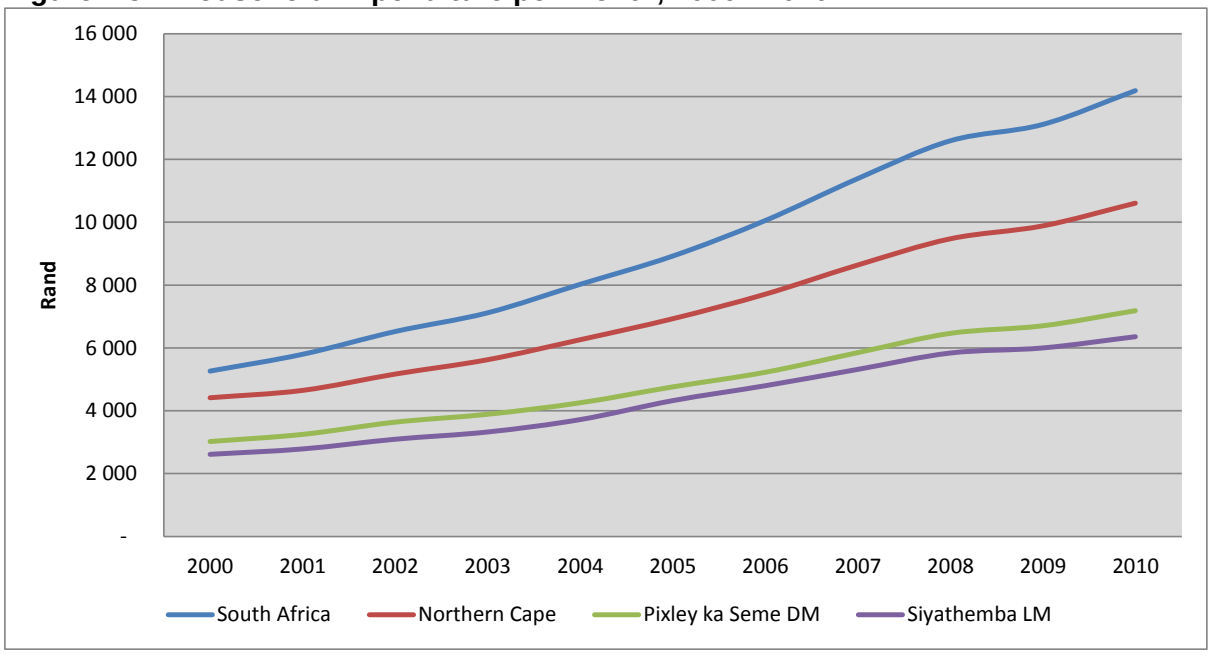
Table 2.4 – Household Income Distribution, 2007

Monthly Income	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
R1 - R400	6.2%	4.4%	4.7%	4.1%
R401 - R800	11.1%	9.8%	9.1%	8.3%
R801 - R1 600	23.5%	25.1%	26.8%	23.5%
R1 601 - R3 200	23.7%	24.5%	27.1%	29.0%
R3 201 - R6 400	14.2%	16.4%	16.2%	18.6%
R6 401 - R12 800	9.4%	10.0%	8.3%	8.4%
R12 801 - R25 600	6.6%	5.8%	4.7%	4.4%
R25 601 - R51 200	3.5%	2.8%	1.7%	2.5%
R51 201 - R102 400	1.2%	0.7%	0.4%	0.0%
R102 401 - R204 800	0.4%	0.3%	0.7%	0.9%
R204 801 or more	0.3%	0.3%	0.2%	0.2%

Source: Statistics South Africa – Community Survey, 2007

Trends in the level of monthly household expenditure are portrayed by Figure 2.5. From this Figure, it is evident that households in Siyathemba have experienced increases in expenditure levels (9.3% on average p.a.) over the past decade in comparison with Pixley Ka Seme (9.0%) and the Northern Cape (9.2%).

Figure 2.5 – Household Expenditure per month, 2000 - 2010



Source: Quantec Research, 2012

Table 2.5 illustrates the distribution in household consumption expenditure in the study area and the larger region. From this Table, it is evident that households in all the areas under observation spend most of their disposable income on food, beverages and tobacco. This is especially true with regards to households in Siyathemba, which spend around 26% of their income on this product group. In comparison, local households spend slightly less (7.2%) on durable goods, such as furniture and personal transport equipment in line with the Northern Cape (7.2%).

Table 2.5 – Household Consumption Expenditure, 2010

Household Expenditure Item	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Furniture, household appliances, etc.	1.6%	1.3%	1.1%	1.1%
Personal transport equipment	4.2%	3.8%	3.7%	3.7%
Recreational and entertainment goods	1.4%	1.6%	1.7%	1.8%
Other durable goods	0.7%	0.6%	0.6%	0.6%
Clothing and footwear	5.2%	4.3%	4.0%	4.1%
Household textiles, furnishings, glassware, etc.	1.4%	1.2%	1.0%	1.0%
Motor car tyres, parts and accessories	1.4%	1.2%	1.2%	1.2%
Recreational and entertainment goods	0.8%	0.9%	0.9%	1.0%
Miscellaneous goods	0.5%	0.6%	0.6%	0.6%
Food, beverages and tobacco	26.4%	27.3%	26.5%	26.0%
Household fuel and power	3.5%	3.0%	3.1%	3.0%
Household consumer goods	4.0%	3.9%	3.8%	3.7%
Medical and pharmaceutical products	1.8%	1.8%	1.9%	2.0%
Petroleum products	3.5%	3.2%	3.0%	3.1%
Recreational and entertainment goods	0.8%	0.7%	0.8%	0.8%
Rent	12.3%	14.7%	15.2%	14.6%
Household services, including domestic servants	2.7%	2.7%	2.8%	2.8%
Medical services	6.1%	6.0%	6.3%	6.5%
Transport and communication services	8.9%	8.9%	9.1%	9.1%
Recreational, entertainment and educational services	4.3%	3.9%	3.9%	4.0%
Miscellaneous services	8.8%	8.5%	8.7%	9.3%
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**

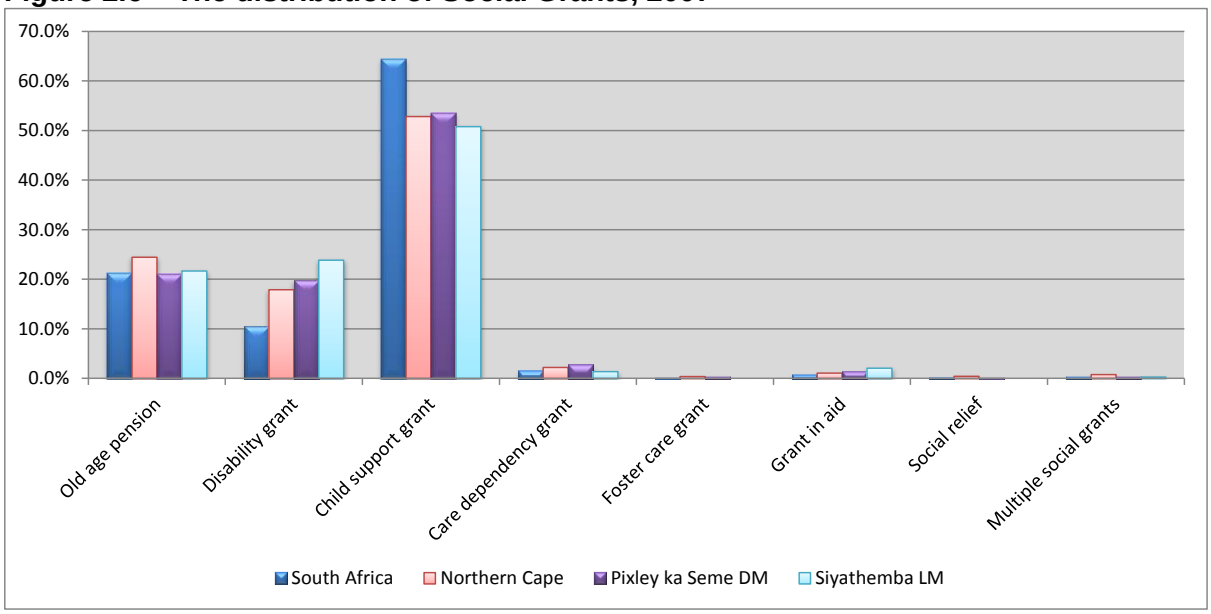
Source: Quantec Research, 2012

Other observations in this regard reveal that households in Siyathemba typically spend less on entertainment, medical services & pharmaceutical products and transport. Although this expenditure profile would also be skewed in relation to the income profile, it does reveal that local communities spend a larger part of their income on “necessary” items rather than “luxury” items.

2.2.2.3. Access to Social Grants

During 2007, some 5,200 people in Siyathemba received social grants, which accounted for 11.9% of such grants in the District. The most popular grant received by dependents in all four regions under observation was the child support grant. In Siyathemba around 2,600 people received this grant during 2007. In fact, the child support grant made up 50.8% of all social grants received in Siyathemba, slightly lower that Pixley Ka Seme, Northern Cape and South African during 2007.

Figure 2.6 – The distribution of Social Grants, 2007



Source: Statistics South Africa – Community Survey, 2007

The second most popular social grant received by dependents in all four regions was disability, followed by old age pensions grants. In Siyathemba, some 1,200 people received a disability grant, while about 1,400 received an old age pension grant during 2007.

2.2.3. Crime

During 2010, nearly 839 crimes were reported at police stations in the Siyathemba municipal area. Since 2005, the total number of reported crimes has increased by 0.2% on average per annum. Table 2.6 presents the distribution of crimes reported at local police stations during 2010.

In Siyathemba, the most crimes were reported at the Prieska (595 reported incidents) police station during 2010, followed by Marydale (158 reported incidents). In this regard, the following observations were made:

- **Prieska** – The most common type of reported incidence here during 2010 was *assault with the intent to inflict grievous bodily harm,* followed by *theft.* The number of crimes reported at the local police station increased from 574 in 2009 to 595 in 2010. The fastest growing crime type is currently *assault with the intent to inflict grievous bodily harm.*
- **Niekerkshoop –** The most frequently reported incidence during 2010 was *stock theft,* followed by *assault with the intent to inflict grievous bodily harm.* The number of crimes reported at the local police station decreased from 119 in 2009 to 86 in 2010. The fastest growing crime type is currently *stock theft.*
- **Marydale –** During 2010, the crime most often reported was *assault with the intent to inflict grievous bodily harm,* followed by *common assault.* The number of crimes reported at the local police station increased from 129 in 2009 to 158 2010. The fastest growing crime type is currently *drug related crime.*

Table 2.6 – Incidence of Crime reported at local Police Stations, 2010

Type of Crime	Marydale	Niekerkshoop	Prieska
Assault with the intent to inflict grievous bodily harm	39	13	178
All theft not mentioned elsewhere	14	11	76
Common assault	22	1	60
Stock-theft	10	26	34
Drug-related crime	24	10	26
Malicious damage to property	6	3	39
Burglary at residential premises	6	11	28
Total Sexual Crimes	13	1	27
Burglary at non-residential premises	3	3	29
Commercial crime	2	2	15
Shoplifting	0	0	18
Attempted murder	4	0	11
Crimen injuria	8	1	5
Murder	0	1	11
Driving under the influence of alcohol or drugs	2	0	9
Theft out of or from motor vehicle	1	2	7
Common robbery	0	1	6
Aggravated robbery	0	0	6
Arson	1	0	4
Culpable homicide	1	0	2
Theft of motor vehicle and motorcycle	0	0	2
Public violence	0	0	2
Neglect and ill-treatment of children	2	0	0
Illegal possession of firearms and ammunition	0	0	0
Kidnapping	0	0	0
Total	**158**	**86**	**595**

Source: The South African Police Service, 2012

Overall, the type of crime most frequently occurring (as per reported incidences) during 2010 in Siyathemba was *assault with the intent to inflict grievous bodily harm* (230 reported incidents), followed by *theft* (76 reported incidents).

2.3. Economic Profile

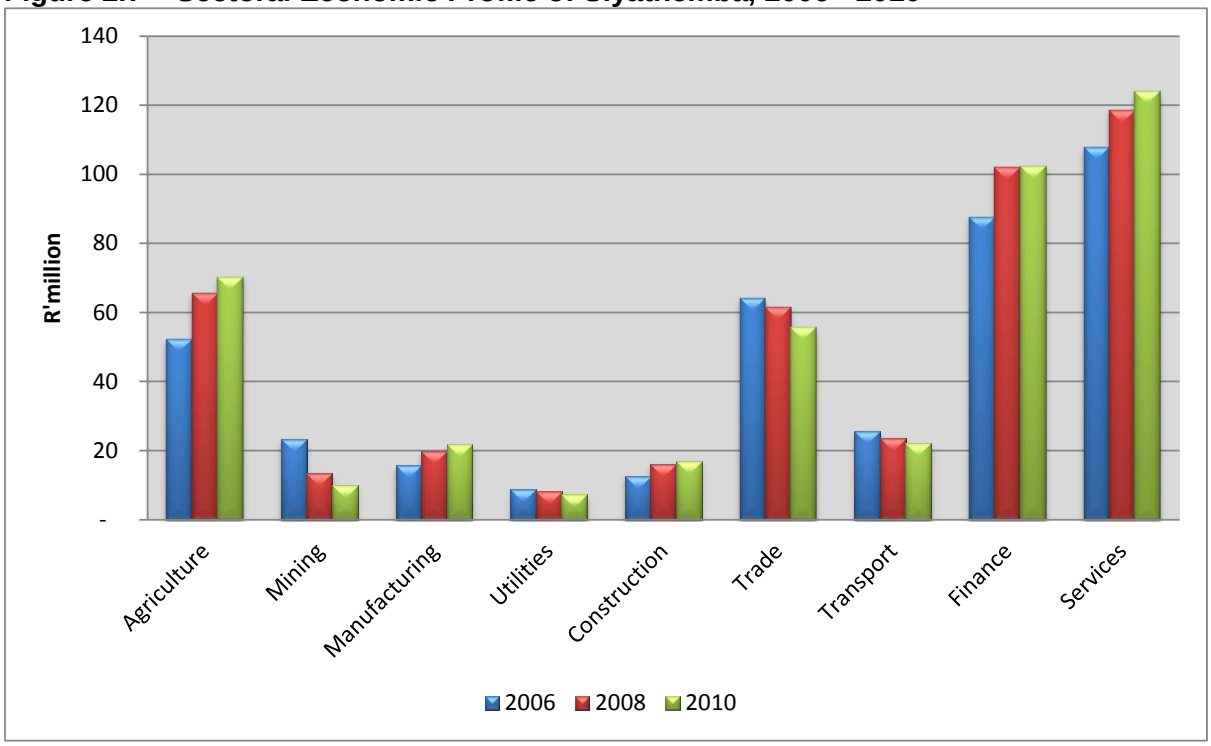
The following sub-section provides an analysis of the local economy in the context of the National, Provincial, and District environment.

2.3.1. Economic Production & Growth

Gross Domestic Product (GDP) is defined as the market value of all final goods and services produced within an area in a given period of time. The size of an economy is usually measured by its Gross Domestic Product. This value is equal to the economic wealth of the area; all the things of economic value that can be bought or sold that have been produced in the area in one year.

The Sectoral GDP Profile of Siyathemba is illustrated by Figure 2.7. From this profile, it is evident that the economy is highly unbalanced and dominated by the Government Services sector, which contributed R124 million (or 28.9%) to the local economy in 2010. This sector was followed by the Financial Services (23.8%) and Agriculture sectors (16.4%). The rest of the sectors illustrated in Figure 2.7 all contributed around 31% to the local economy.

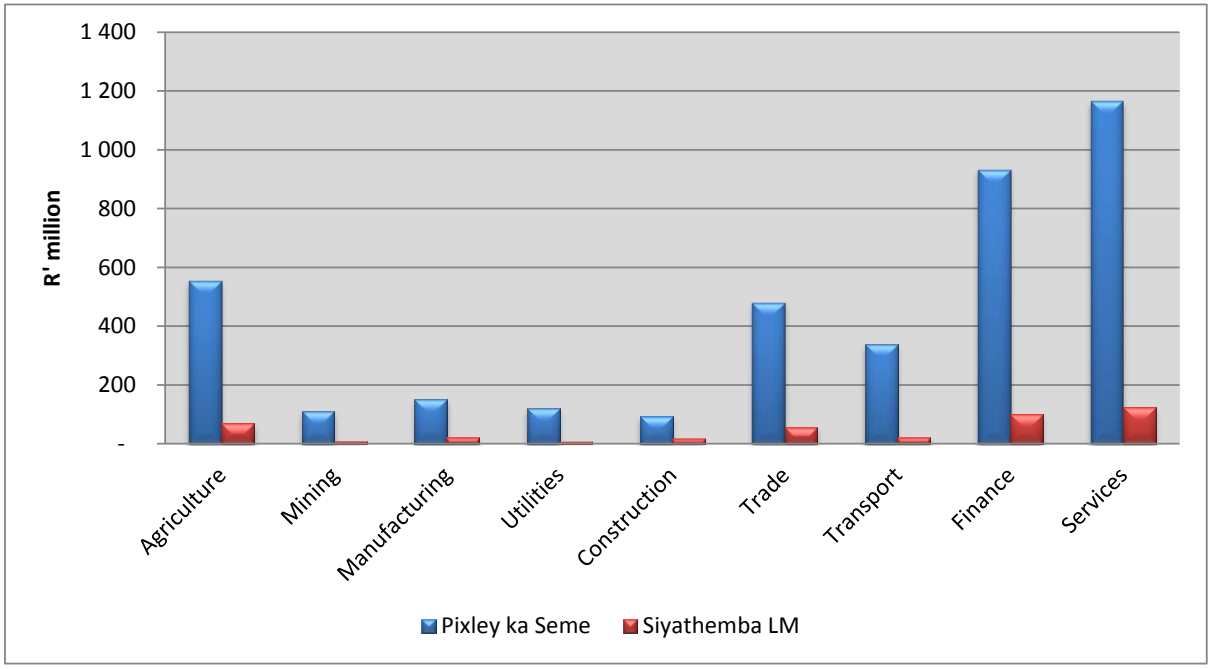
Figure 2.7 – Sectoral Economic Profile of Siyathemba, 2006 - 2010



Source: Quantec Research, 2012

Since 2006, the local economy grew by 2.0% on average per annum. The fastest growing sectors during this period were Manufacturing (8.3%) and Agriculture (7.7%).

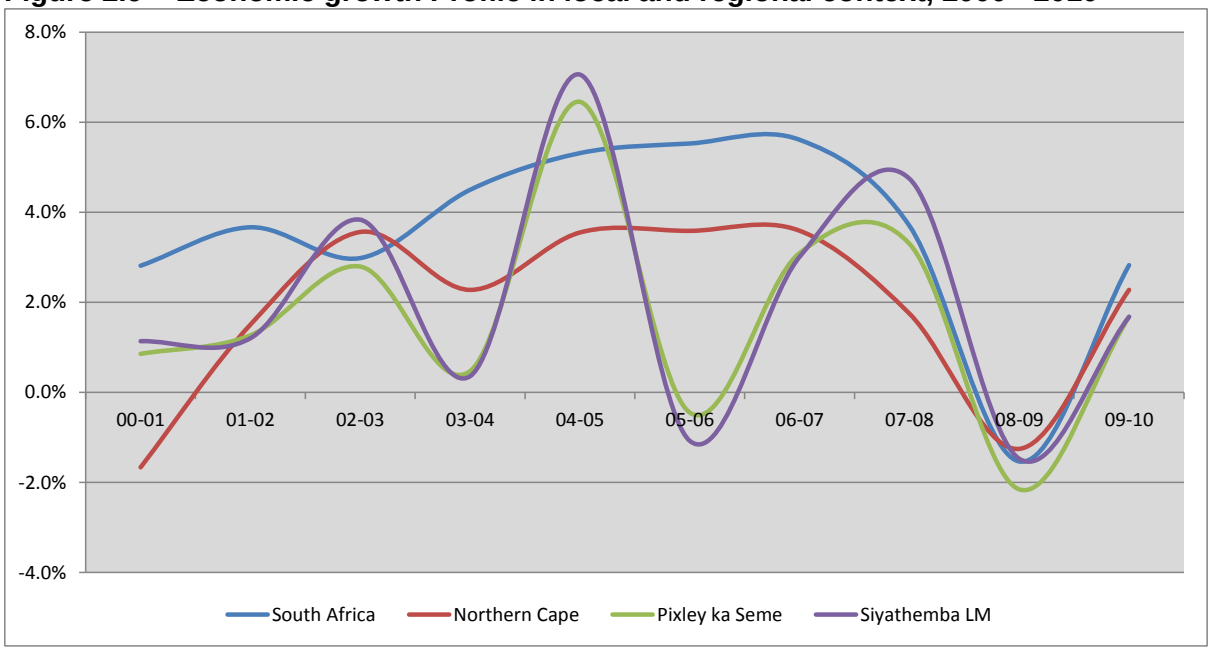
Figure 2.8 – Sectoral Economic Profile of Siyathemba compared to Pixley Ka Seme, 2010



Source: Quantec Research, 2012

The local economy in District context is illustrated by Figure 2.8. From this profile, it is evident that the Construction sector of Siyathemba makes a significant contribution to that of Pixley Ka Seme (some 18.0% in 2010). Overall, the local economy contributed 10.9% to the District economy during 2010.

Figure 2.9 – Economic growth Profile in local and regional context, 2000 - 2010



Source: Quantec Research, 2012

The local economy grew by 1.7% during 2009/10 compared to the District (1.7%), Provincial (2.3%) and National (2.8%) growth rates (see Figure 2.9). From 2000 to 2010. an average

growth rate of 2.0% can be observed in Siyathemba, which was inadequate to create sufficient jobs in the local economy to reduce the unemployment rate. Local economic growth is not strongly linked with that of the District, which reflects a local economy that is highly concentrated (in Agriculture) with a less balanced profile when compared with the larger region. This implies that the local economy is more vulnerable to market fluctuations (especially in terms of fluctuations that have an impact on regional agriculture).

Table 2.7 illustrates the ten year average annual economic growth rates (2000 to 2010) in Siyathemba and the larger region. From this Table is evident that growth in the local economy was mainly driven by Manufacturing (10.2% p.a.), Construction (6.6%) and Finance (5.6% p.a.). The other sectors in the local economy contracted over the past ten years (most notably in the Mining, Utilities and Transport).

Table 2.7 – Average Annual Economic Growth by Sector, 2000 - 2010

Sector	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Agriculture	1.7%	3.0%	2.0%	4.6%
Mining	0.1%	-1.3%	-5.0%	-13.0%
Manufacturing	2.3%	2.6%	3.9%	10.2%
Utilities	1.8%	-0.5%	-0.7%	-2.8%
Construction	8.3%	5.4%	2.8%	6.6%
Trade	3.1%	2.5%	-0.2%	-0.9%
Transport	5.0%	4.1%	-1.3%	-2.9%
Finance	5.9%	4.3%	6.6%	5.6%
Services	2.8%	2.9%	1.3%	3.1%
Total	**3.5%**	**1.9%**	**1.7%**	**2.0%**

Source: Quantec Research, 2012

When compared to the larger region, it can be observed that local growth in the Finance sector (5.6% p.a.) is relatively in line with the District (6.2% p.a.), indicating a strong growth correlation and the importance of Siyathemba to Pixley Ka Seme in terms of its contribution to District Financial Services.

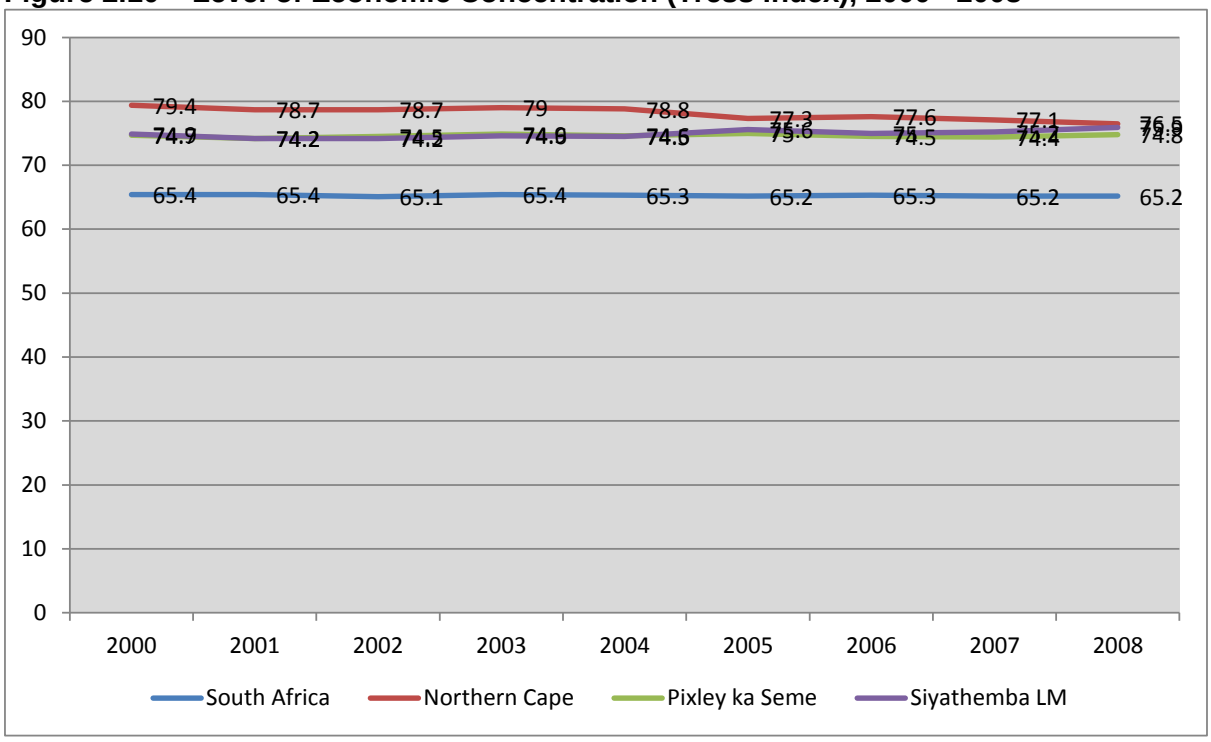
2.3.2. The Character of the Local Economy

Figure 2.10 illustrates the level of economic concentration in Siyathemba and compares it with the larger region. The level of diversification or concentration of a region's economy is measured by a tress index. A tress index of zero represents a totally diversified economy. On the other hand, the higher the index (closer to 100), the more concentrated or vulnerable the region's economy to exogenous variables, such as adverse climatic conditions, commodity price fluctuations, etc.

It is evident that the level of concentration in Siyathemba is very high (75.9) when compared with the larger region (especially with the South African average of 65.2). Since 2000, the tress index in the local economy increased from 74.9, while the Provincial and National economies became more diversified. This implies that the local economy is becoming increasingly vulnerable to exogenous conditions, such as market fluctuations and especially variables that have a direct impact on agriculture. It is thus of central importance that LED role players endeavour in their development efforts towards the diversification of the economy.

A location quotient compares the local share of economic activity in a particular industry to the regional share of economic activity in the same industry. The result reveals the degree of local specialisation in each industry. If the location quotient for a particular industry is between zero and one, the study area is less specialised than the region, while location quotients greater than one reveal greater specialisation of the industry in the local economy than in the regional economy. Also, observing location quotients over time show if an industry is becoming more or less specialised in an area.

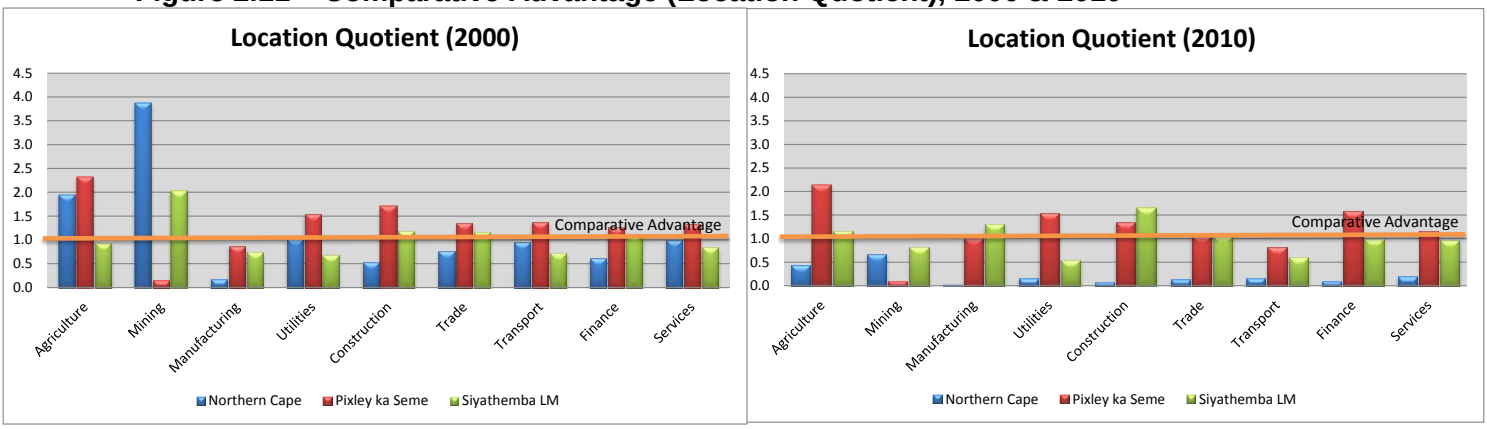
Figure 2.10 – Level of Economic Concentration (Tress Index), 2000 - 2008



Source: Quantec Research, 2012

The location quotient for Siyathemba, Pixley Ka Seme, the Northern Cape and South Africa is compared in Figure 2.11. From the 2010 profile it is evident that Siyathemba's economy has a comparative advantage in Construction, Manufacturing, and Agriculture. In fact, the location quotient for the Agriculture sector in Siyathemba improved from 0.9 in 2000 to 1.2 during 2010.

Figure 2.11 – Comparative Advantage (Location Quotient), 2000 & 2010



Source: Quantec Research, 2012

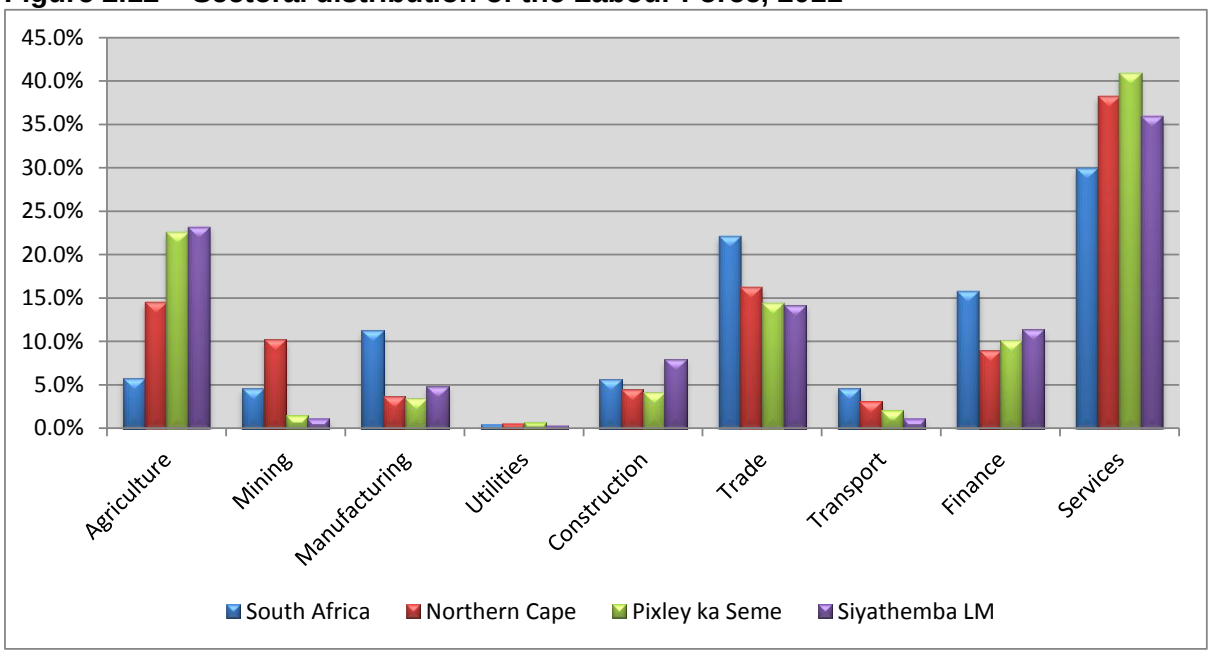
It is also noted that Pixley Ka Seme enjoys a comparative advantage with regards to Utilities, while Siyathemba does not. In fact, Siyathemba's location quotient for Utilities declined since 2000, while that of Pixley Ka Seme has been constant. It would thus be of key importance in the next section of this report (i.e. the Development Potential Analysis) to explore the reasons for this phenomenon in order to identify strategies that would allow local industries to benefit from this regional development trend.

2.4. Labour Profile

2.4.1. Overview

The 2010 sectoral distribution of the labour force in South Africa, the Northern Cape, Pixley Ka Seme and Siyathemba is illustrated by Figure 2.12. From this profile, it is evident that most workers in Siyathemba are employed in the Government Services sector (around 1,700 workers), followed by Agriculture (about 1,100 workers) and the Trade (about 670 workers) sectors.

Figure 2.12 – Sectoral distribution of the Labour Force, 2011

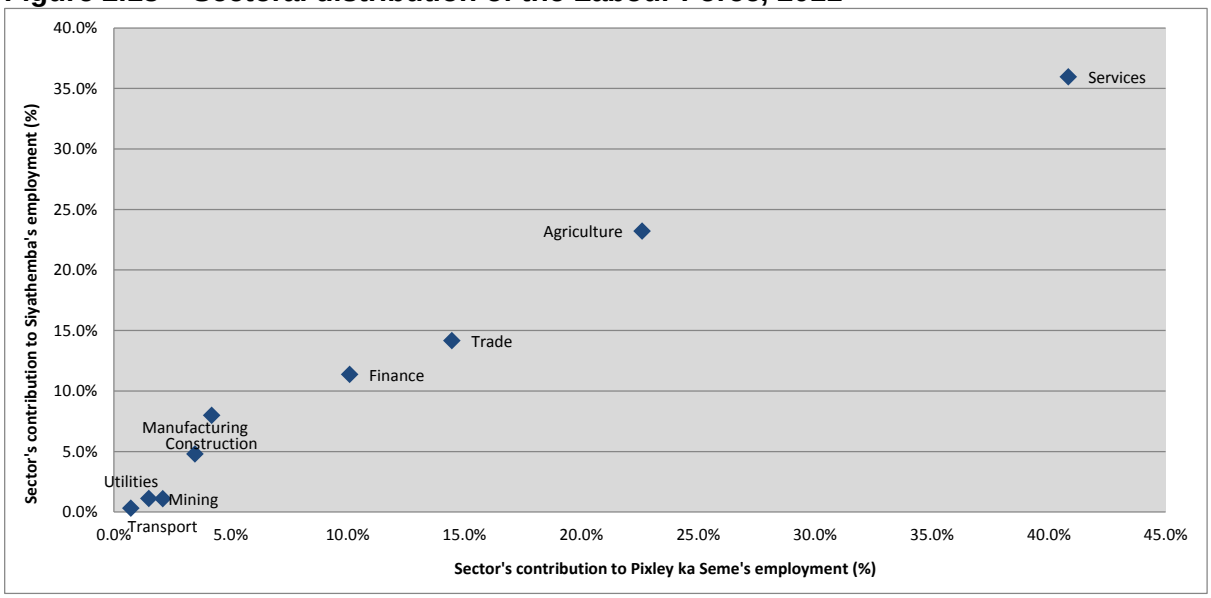


Source: Quantec Research, 2012

Figure 2.13 provides a closer comparison between the sectoral labour profiles of Pixley Ka Seme and Siyathemba. When compared to the District, it can be observed that the labour force of Siyathemba is highly concentrated in the Services sector, while the other regions under observation have a more balanced labour distribution.

Local and regional trends in total employment are depicted by Figure 2.14. From this Figure, it is clear that total employment in Siyathemba has been in fluctuating over the last ten years. Moreover, employment in the study area declined marginally from some 4,800 jobs during 2000 to just below 4,700 in 2010. Over a ten-year period, this could be translated to an average annual decline of 0.2%. Over the same period, employment in Pixley Ka Seme declined by 1.3% on average per annum, while that of the Northern Cape and South Africa increased by 0.9% and 0.5% respectively.

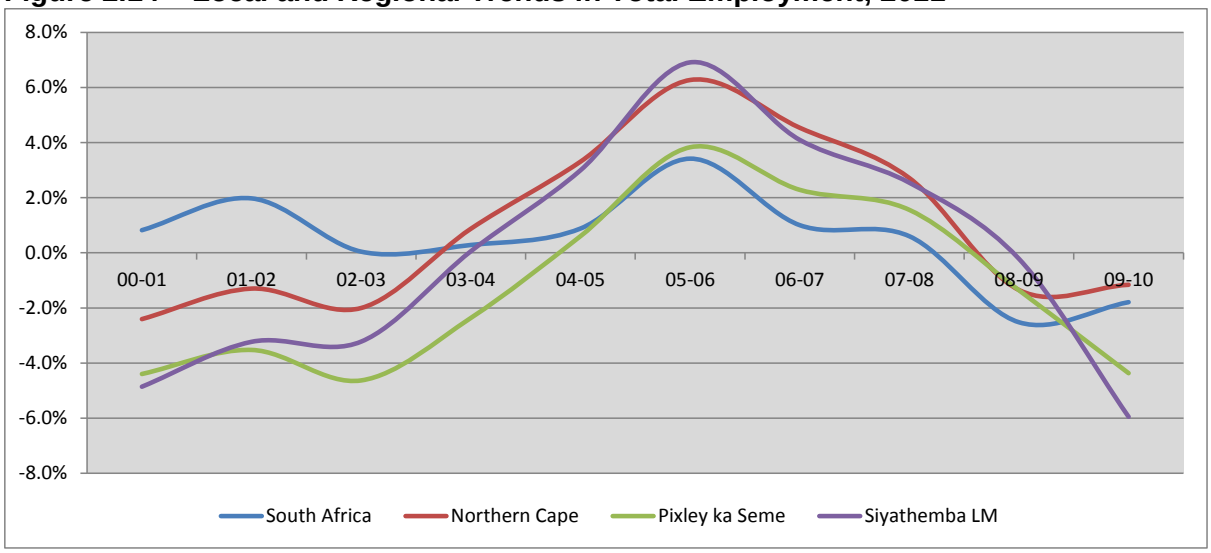
Figure 2.13 – Sectoral distribution of the Labour Force, 2011



Source: Quantec Research, 2012

It is also observed that local employment trends are not well-integrated with that of the larger region, which could be attributed to the concentrated nature (in the Agriculture sector) of the local economy. In contrast, employment trends in Pixley Ka Seme, the Northern Cape and South Africa follow growth profiles that are better correlated due to higher levels of diversity in these economies. The threat presented by employment vulnerability and its socio-economic implications for local communities in Siyathemba cannot be emphasised enough.

Figure 2.14 – Local and Regional Trends in Total Employment, 2011



Source: Quantec Research, 2012

Employment growth is broken down by sector in Table 2.8. From this Table, it is evident that employment in the Mining sector (-7.9% p.a.) has been in steep decline over the past decade, followed by Transport (-5.3%) and Agriculture (-4.9%).

Table 2.8 – Average Annual Employment Growth by Sector, 2000 - 2010

Sector	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Agriculture	-7.3%	-5.5%	-6.2%	-4.9%
Mining	2.8%	3.9%	0.5%	-7.9%
Manufacturing	-1.2%	-3.2%	-2.4%	4.1%
Utilities	1.1%	2.5%	1.8%	-2.0%
Construction	0.1%	-0.3%	-3.4%	1.5%
Trade	1.1%	2.2%	-0.5%	-1.2%
Transport	2.1%	3.1%	-2.1%	-5.3%
Finance	2.6%	5.3%	7.6%	6.6%
Services	1.6%	3.1%	1.4%	3.2%
Total	**0.5%**	**0.9%**	**-1.3%**	**-0.2%**

Source: Quantec Research, 2012

When these employment trends are compared with those observed for GDP (see Table 2.7), it is noted that total employment declined over the past decade (by 2.5% p.a.) while the economy grew by 2.0% per annum in GDP terms. This phenomenon is referred to as "jobless growth" which implies that local economy is becoming less labour intensive and more capital intensive.

2.4.2. Characteristics of the Labour Force

Key labour and employment indicators are presented by Table 2.9 below for Siyathemba and the larger region.

Table 2.9 – Regional Employment Indicators, 2000 & 2009

Labour Indicators	South Africa		Northern Cape		Pixley Ka Seme DM		Siyathemba LM	
	2000	2009	2000	2009	2000	2009	2000	2009
Labour force ('000)	11,502	12,261	245	272	44	41	5	5
Unemployment rate (%)	30.2	25.1	27.0	27.6	27.7	33.0	26.8	34.7
Labour force participation rate (%)	61.1	52.0	52.5	53.3	54.0	53.6	53.2	57.4
Highly Skilled Workers	12.3%	12.7%	10.7%	11.7%	9.4%	10.9%	9.3%	10.4%
Skilled Workers	39.3%	42.7%	35.4%	39.7%	34.3%	38.6%	34.9%	37.8%
Semi- and unskilled workers	48.4%	44.5%	53.8%	48.6%	56.3%	50.6%	55.8%	51.8%

Source: Quantec Research, 2012

From this Table, the following observations were made:

- While the number of jobs increased in South Africa, as well as the Northern Cape and Pixley Ka Seme between 2000 and 2009, it declined in Siyathemba.
- During 2009, the unemployment rate for Siyathemba was estimated at some 34.7% which was slightly higher than the District average. The unemployment rate has steadily increased in Siyathemba over the past decade.
- The labour force participation rate indicates the portion of working-age adults who are employed and those actively seeking employment. Since 2000 the portion of such adults increased from 53.2% to 57.4%.

- Compared to the other regions under observation, a small portion of workers (10.3%) in Siyathemba can be classified as highly skilled. In fact, more than 52% of workers can be regarded as semi- or unskilled workers.

2.5. Institutional Profile

Siyathemba's commitment to Local Economic development must be facilitated through a dedicated administration and bureaucracy. This means that the Municipality's institutional structure must be configured in such a way that it supports LED and that the whole institution is geared towards integrated planning and implementation.

2.5.1. The Siyathemba Institutional Structure

Towards the end of making informed recommendations for implementing the LED Strategy from an institutional perspective, it is important to outline the main objectives of the Strategy to inform the Municipality's organisational structure. These objectives are:

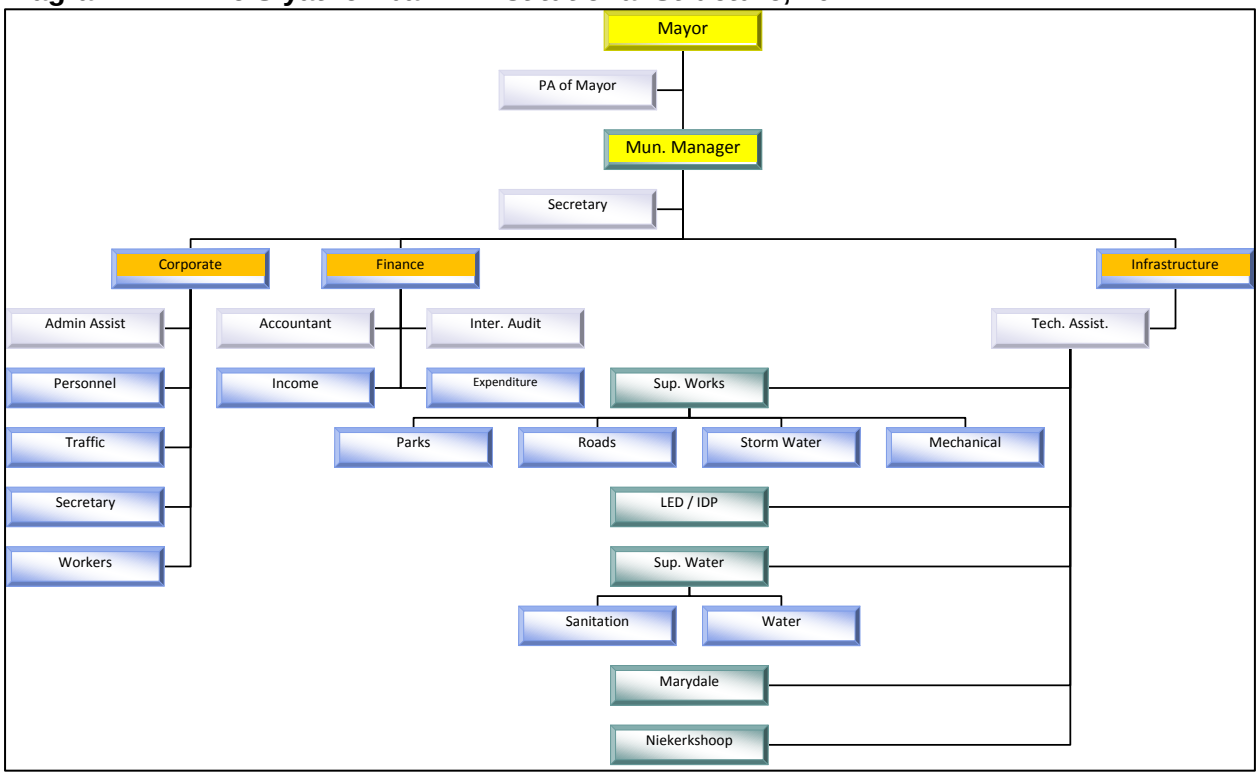
1. To facilitate and promote employment creation and poverty alleviation among local communities.
2. To promote internal and external investment into the local economy that would promote the growth of existing businesses, as well as the establishment of new businesses.
3. To ensure that local entrepreneurs and SMMEs are provided with the necessary support to establish and grow their businesses.
4. To implement strategies, programmes and projects that would create an environment conducive to investment and business growth.
5. To engage and interact with potential private sector investors.
6. To actively promote and market the local area to internal and external investors, in terms of local investment opportunities, planned infrastructure developments by the Municipality and development by other private investors.
7. To investigate approaches for lowering the cost of doing business in the area, as well as possible investment incentives aimed at strategic locations and economic sectors (such as Agriculture & Tourism).
8. To plan for, evaluate, manage and implement LED programmes as a coordinated effort between the Directorates of the Municipality and other role players.
9. To spearhead and drive community interaction, participation and buy-in of LED initiatives in local communities.
10. To act as the guardian of local people by ensuring that LED initiatives benefit them and that LED implementation occurs in such a way that labour intensive methods are applied.
11. To facilitate local access to and taking full advantage of LED and other development support programmes and funding sources provided by government, the private sector and other institutions (such as DTI & IDC programmes and venture capital).

More specifically, the Municipal IDP (2011/12) set the following criteria that should be considered in order for the municipality to have a credible LED Strategy:

- Effective and efficient service delivery.
- Optimal human and natural resource development and utilization.
- Local economic development and job creation.
- A vibrant tourism industry.
- A healthy HIV/Aids-free and secure community.
- A community friendly environment.

The institutional structure of the Siyathemba Local Municipality is illustrated by Diagram 2.1.

Diagram 2.1 - The Siyathemba LM Institutional Structure, 2012



Source: Siyathemba Municipal Integrated Development Plan, 2011-12

From this Diagram, the following observations can be made:

1. There are three Directorates on equal footing under the management of the office of the Municipal Manager in the structure.
2. The LED Function has not been designated as one of these Directorates but placed under the Infrastructure Directorate.
3. There does not seem to be any direct reporting linkages between LED and the office of the Municipal Manager.
4. Most of the Municipal structure is dedicated to issues relating to administration followed by traditional town planning services (such as water, electricity, refuse removal etc.).

2.5.2. Institutional Recommendations for LED

Due to the high levels of poverty, the concentrated nature of the local economy and the growing unemployment rate, it is strongly recommended that an LED Directorate be established that reports directly to the office of the Municipal Manager.

Diagram 2.2 – Recommended Institutional Structure for the LED Directorate

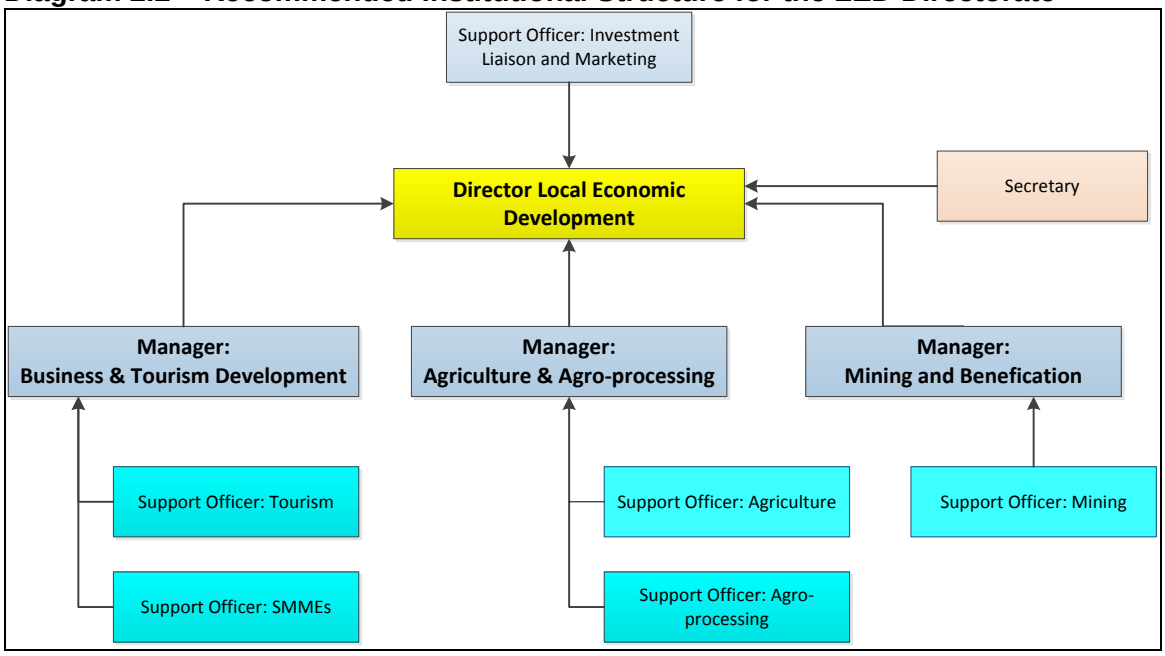


Diagram 2.2 illustrates the recommended institutional structure for the LED Directorate, in line with the LED Strategy Objectives as well as the IDP's LED Targets and Programmes (2011/12). This structure is deemed to be appropriate to drive and manage the LED functions of the Municipality due to the following reasons:

- The Structure aligns with the LED development objectives, targets and programmes and is therefore geared towards implementation.
- The Structure has been streamlined to promote cooperative planning and integration within the broader Municipal structure.
- The Structure makes provision for hands-on management backed up by the necessary support.
- The Structure allows for clear and predictable performance monitoring of the LED Directorate, as well as the officials assigned to it.
- The Structure allows for Investment Marketing which is seen as a vital part of the LED Strategy.
- The Structure is organised in such a way that it allows for the monitoring of business growth and employment trends associated with the objectives of the LED Strategy.

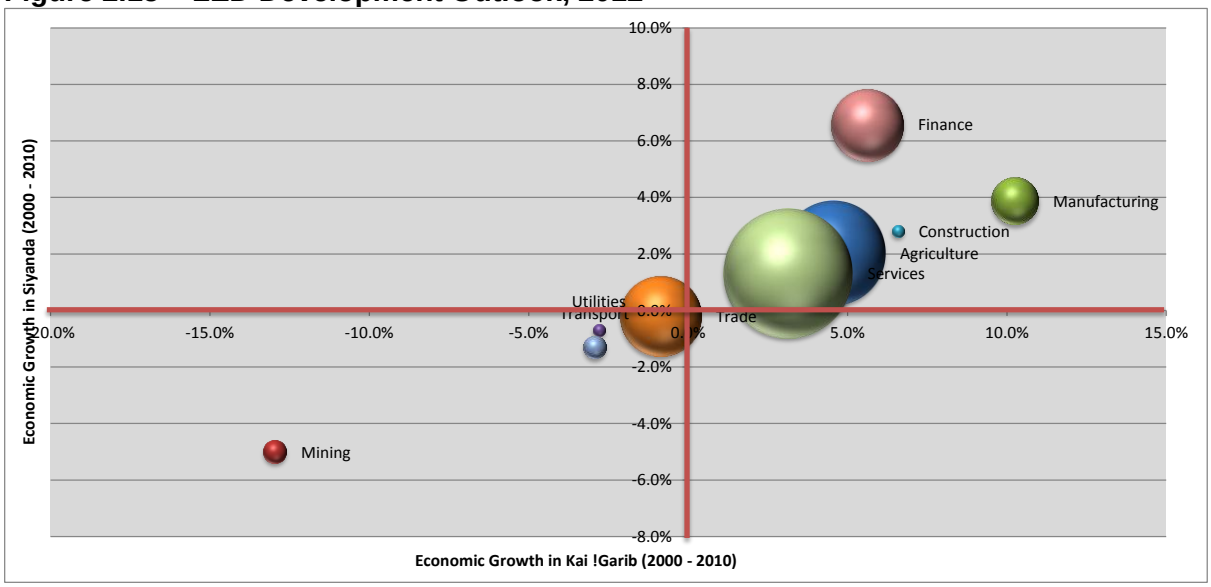
2.6. Inferences for development

Based on the discussion and data presented in this Section, the following inferences for development can be drawn:

1. During 2010, Siyathemba had a population of just over 21,000 people which made up 11.9% of the District Population and 1.9% of the Provincial Population. The local population total contracted by 0.01% per annum over the last decade. This implies lower fertility rates and that more people are leaving the area when compared to regional averages. The average age of the local population is also becoming older.
2. In Siyathemba, around 14% of adults have a matric certificate compared to 19.7% of adults in Pixley Ka Seme and 24.7% in the Northern Cape. Since 2000, the number of adults with a matric certificate decreased.
3. A total of almost 5,600 household dwellings were estimated in the Siyathemba municipal area during 2010. This accounted for some 11.7% of all household dwellings in the District, which ranked Siyathemba fourth among Pixley Ka Seme's Local Municipalities. All local households are well serviced in their access to municipal services (i.e. piped water, electricity and brick housing).
4. Households in Siyathemba experience lower levels of income (on average) when compared with the District and the Province. During 2010 the average monthly income per household was R6,912 in Siyathemba compared with the District average of R7,652. Since 2001, household income has grown by 9.3% on average p.a. in Siyathemba compared to 8.7% in Pixley Ka Seme and 9.1% in the Northern Cape. This means that there is a growing welfare gap between households in Siyathemba and the larger region.
5. Local households spend most of their income (almost 30%) on food, beverages and tobacco.
6. During 2010, some 830 crimes were reported at police stations in the Siyathemba municipal area. Since 2005, the total number of reported crimes has increased by 0.2% on average per annum. Overall, the most common type of crime during 2010 in Siyathemba was assault with the intent to inflict grievous bodily harm (230 reported incidents) followed by theft (101 reported incidents).
7. The economy of Siyathemba is highly unbalanced and dominated by the Government Services sector, which contributed R124 million (or 28.9%) to the local economy in 2010. This sector was followed by the Finance (23.8%) and Agriculture sectors (16.4%).
8. Since 2006 the local economy grew by 2.0% on average per annum. The fastest growing sectors during this period were Manufacturing (10.2%), Construction (6.6%) and Finance (5.6%). Siyathemba has a relative comparative advantage in the Construction sector.
9. Most workers in Siyathemba are employed in the Government Services sector (almost 1,750 workers), followed by Agriculture (about 1,100 workers) and the Trade (about 670 workers) sectors.
10. During 2009 the unemployment rate for Siyathemba was estimated at some 34.7% which was slightly higher than the District average. The unemployment rate has steadily increased in Siyathemba over the past decade.

Based on the economic production and employment data presented in this Section, a Development Outlook for LED is presented in Figure 2.15. According to this Figure, Finance, Manufacturing, Construction and the Agriculture sectors performed well locally, as well as in the District over the past decade. On the other hand, the Transport and Mining Sectors in Siyathemba contracted over the last ten years in contrast to the positive growth averages for the District as a whole.

Figure 2.15 – LED Development Outlook, 2012



Source: Quantec Research, 2012

While the first group of sectors can be regarded as drivers of the local economy with more associated aggressive growth strategies, the latter must be interrogated further in the next Section of this report to understand the underlying factors for its contraction (in contrast to positive District growth). These sectors should be associated with business retention and attraction strategies.

SECTION 3: Potential Analysis

3.1. Introduction

The purpose of this Section is to provide an assessment of all the relevant economic activities within the main economic sectors. Each sector will be discussed within provincial and local context, with resultant development opportunities put forward.

Before commencing with the discussion of the relevant development potential criteria, it is deemed necessary to first clarify the meaning of potential. The Concise Oxford Dictionary (1990) describes 'potential' as follows:

- 'capable of coming into being or action'
- 'the capacity for use or development'
- 'usable resources'.

Therefore, potential refers to resources and/or capacity, which can be utilised or developed. In order to identify or determine this development potential and/or opportunities within an economy, a set of criteria is required to evaluate the resource and/or capacity in order to indicate whether said resource can be regarded as having potential. The set of criteria serves as an evaluation tool to identify areas with potential for development and opportunities within each of the local economic sectors. These include:

1. Availability of raw materials and resources
2. Economic linkages
3. Market trends
4. Gap analysis / Agglomeration advantages
5. Logistics / Nodal point function
6. Regional service delivery function
7. Availability of labour
8. Technology change
9. Enabling policy environment

3.2. Agriculture

Agriculture Sector

The agricultural sector incorporates establishments and activities that are primarily engaged in farming activities, although the sector also includes establishments focusing on commercial hunting and game propagation, as well as forestry, logging and fishing.

3.2.1. Pixley Ka Seme Overview

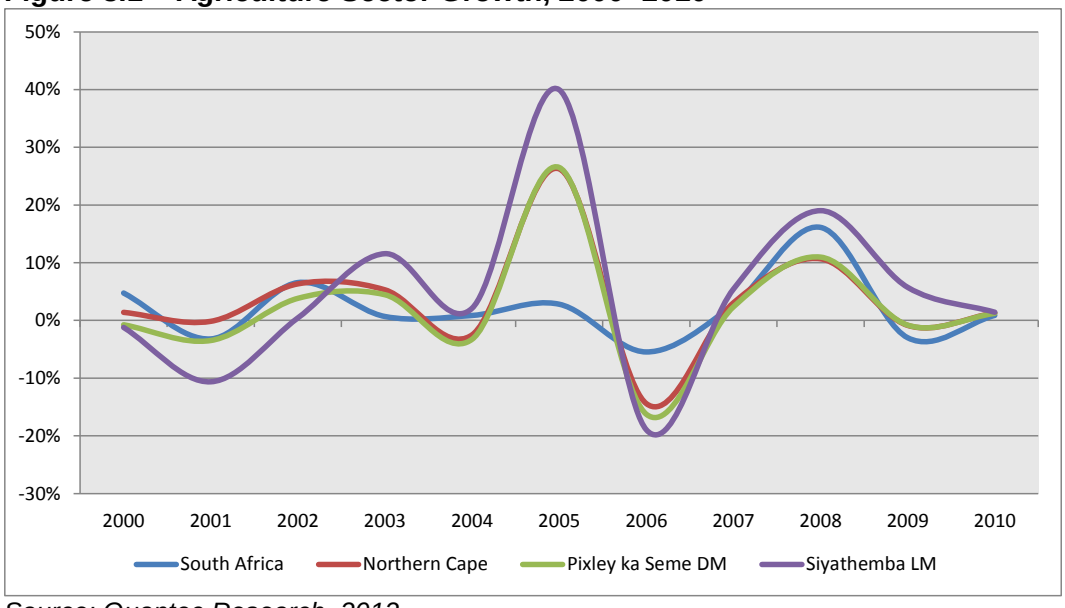
Agricultural production contributed 14.0% to the Pixley Ka Seme District's total economic production in 2008 (GDPR at current prices). Over a ten year period (2000 to 2010), the Agricultural sector experienced an average annual growth of 2.0%.

3.2.2. Siyathemba Overview

The Orange River runs through the Municipality and provides ideal conditions for irrigation farming in Siyathemba, especially the cultivation of grains and vegetables. The main livestock farming in the region include cattle, sheep and goat farming. Game farming also takes place in the area and aids in the development of tourism and hunting activities.

Figure 3.1 indicates the Agricultural production growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. From Figure 3.1 it is apparent that Siyathemba follows a similar production trend to that of Pixley Ka Seme and the Northern Cape Province. The region experienced extensive Agricultural growth from 2006 to 2008.

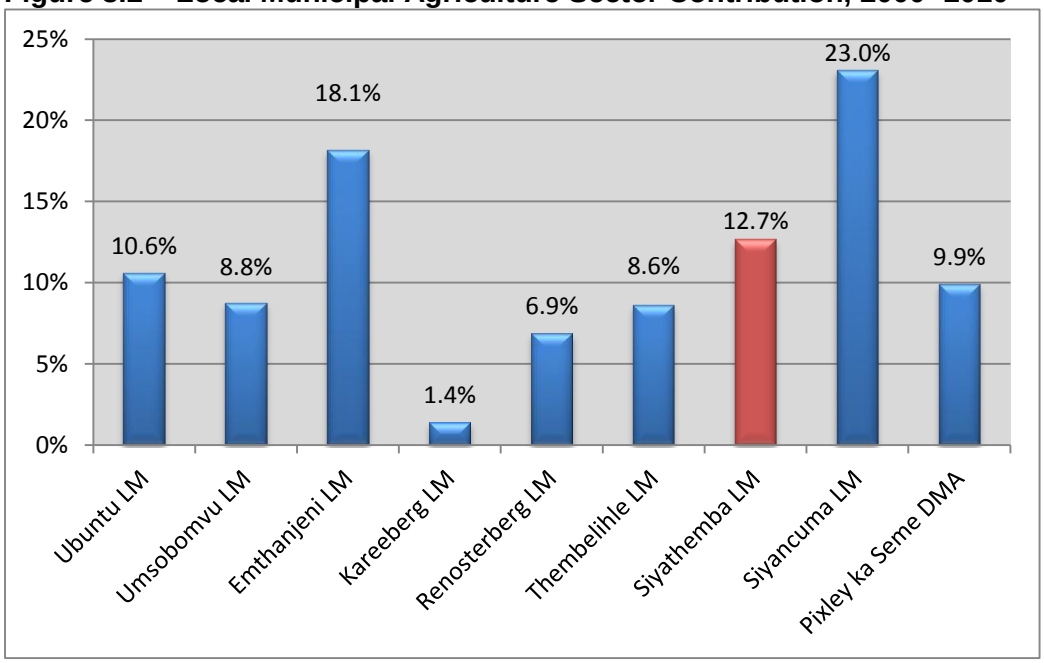
Figure 3.1 – Agriculture Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.2 indicates Siyathemba municipality's Agricultural contribution to Pixley Ka Seme District, compared to the other Local Municipalities. The region contributed 12.7% to the District's sector, making Siyathemba the third largest contributor to the District Agricultural sector.

Figure 3.2 – Local Municipal Agriculture Sector Contribution, 2000- 2010



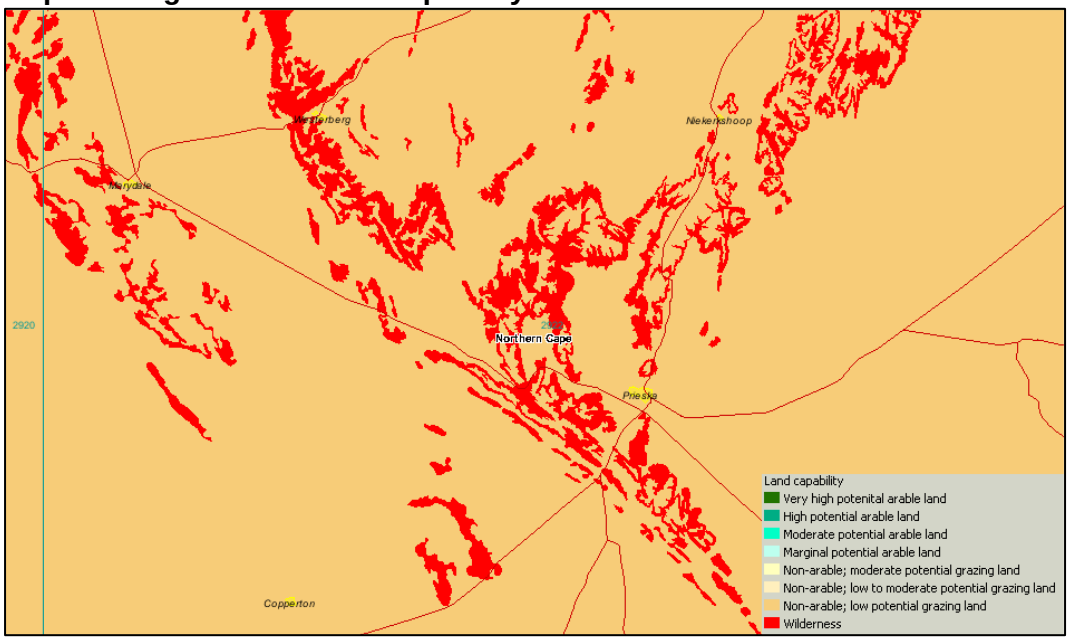
Source: Quantec Research, 2012

Map 3.1 indicates the agricultural land capability of Siyathemba. This map defines the potential for arable and grazing land, which provides an indication of the potential for crop and livestock farming. The map also illustrates the areas that are not specifically suited for agricultural practices.

The following observations may be discerned from the evidence in Map 3.1:

1. Most of the region surrounding Prieska and Niekerkshoop are regarded as low potential arable land. This indicates that the area is not suitable for the cultivation of crops, but is appropriate for sheep and goat farming.
2. Various areas around the region are also regarded as wilderness, and will therefore be suitable for the development of game farming activities.

Map 3.1 – Agriculture Land Capability for Prieska



Source: Agricultural Information System for South Africa (AGIS)

3.2.3. Factors in the Analysis of Development Potential

A. Global Market Trends

Relevant trends that influence the agricultural market include the move towards organic produce, producing goods that work in harmony with, and not against, nature. The concept relies on producing products free from pesticides and antibiotics, giving the farmed animals the chance to roam free as much as possible, within their natural environment. The move towards producing health and diet foods has become a lucrative market within the agricultural sector, providing a wide range of opportunities for farmers to expand their activities to include the production of crops that cater to an ever-growing health-conscious society.

B. Technology Change

Due to the shortage in suitable fertile land for agricultural purposes within the Municipality, the majority of increased production will rely on technological improvements. These technological improvements could increase production and production cost savings, result in better utilisation of scarce resources (i.e. water and fertile land) and enhance management procedures.

Increasingly, methods for extremely efficient irrigation, the use of genetically modified strains that can survive harsher climates, and state-of-the-art indoor growing methods are becoming available.

3.2.4. Development Potential

The following development opportunities have been identified in the Agriculture sector of the Siyathemba Local Municipality:

Table 3.1- Agriculture LED Development Potential

Development Potential
1. Crop farming could be significantly expanded if market demand could be improved. This is especially relevant for irrigated production along the Orange River. 2. Hydroponic production may be well-suited to the area, due to the warm climate (i.e. energy cost saving for hydroponic projects) and available water. 3. Sheep farming could be expanded and beneficiated locally. 4. The local beneficiation of crops can provide valuable local revenue. 5. Electricity shortages could be alleviated through local production. This could justify investment in a local solar power plant. 6. The agricultural sector should be diversified to include higher value products such as essential oils. 7. A poultry and broiler project could be implemented as part of an emerging farmer support programme. 8. A piggery project could be introduced as part of an emerging farmer support programme. 9. Game farming in the area could be expanded to bolster the production of meat. This could then be linked to investment in a local abattoir. 10. There should be a greater focus on agriculture in schools to change the perception of young people that farm work is not “prestigious”. It should be instilled that it is better to work on a farm than being unemployed. 11. Early childhood development programmes should be made available to farm workers (on farms). 12. An agricultural school or college should be developed in the municipal area to foster skills development in the agricultural sector and retain these skills within the local economy.

3.3. Mining

Mining Sector

This sector includes the extracting and beneficiating of minerals occurring naturally, including solids, liquids, crude petroleum and gases. It also includes underground and surface mines, quarries and the operation of oil and gas wells, as well as all supplemental activities for dressing and beneficiating of ores and other crude materials.

3.3.1. Pixley Ka Seme Overview

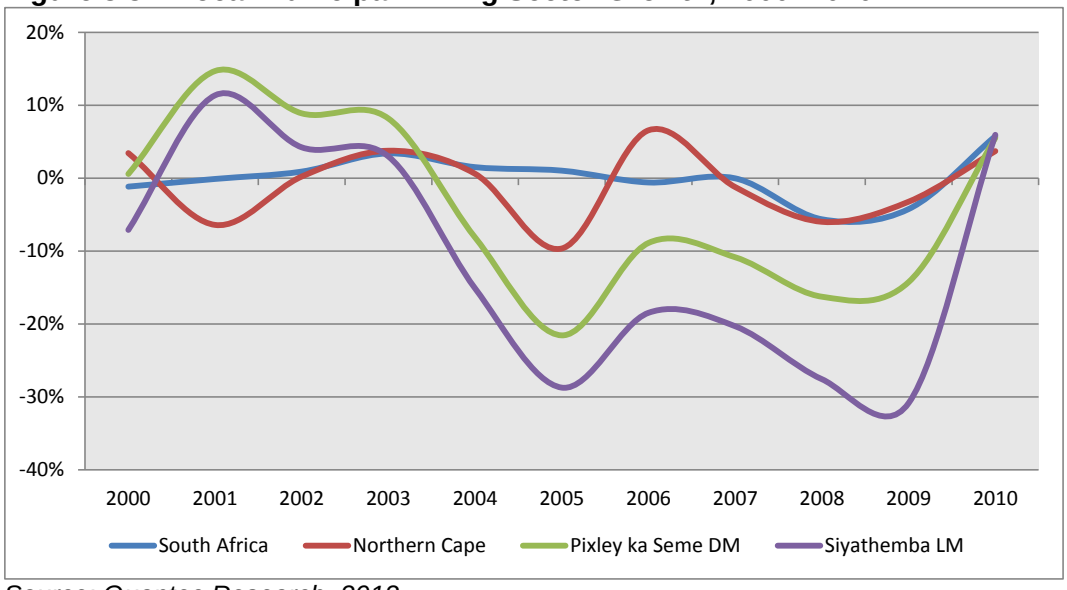
The Mining sector in Pixley Ka Seme contributed 2.8% to the total District GDPR in 2010 (GDPR at current prices). This indicates that the District does not play a significant role in the Provincial Mining sector, where Pixley Ka Seme contributes only 1.4% overall.

3.3.2. Siyathemba Overview

The main deposits in Siyathemba include possible alluvial diamond mining along the Orange River, various semi-precious stones, such as tiger-eye and zinc deposits. The region also has various saltpans for the potential of salt production.

Figure 3.3 indicates the Mining production growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. From Figure 3.3 it is evident that Siyathemba follows a slightly lower production trend to that of the Pixley Ka Seme District's mining sector from 2000 to 2010.

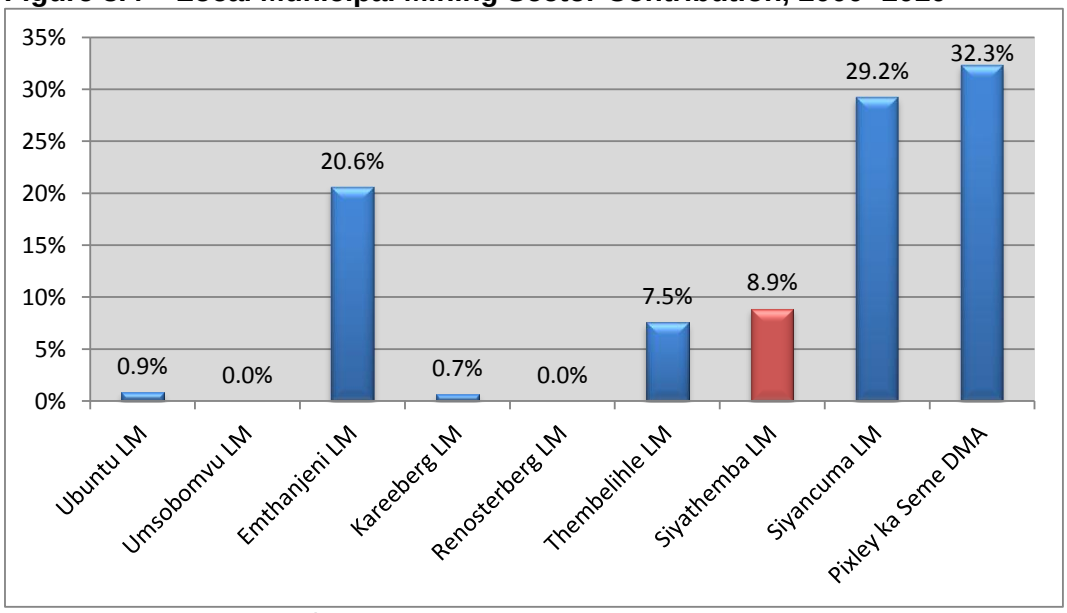
Figure 3.3 – Local Municipal Mining Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.4 indicates the Siyathemba Mining sector's contribution to the Pixley Ka Seme District sector compared to the other Local Municipalities in the region. Siyathemba contributed 8.9% to the District sector, indicating that the region is the fourth most significant mining region in Pixley Ka Seme.

Figure 3.4 – Local Municipal Mining Sector Contribution, 2000- 2010



Source: Quantec Research, 2012

3.3.3. Factors in the Analysis of Development Potential

A. Economic Linkages

Growth around a mineral-based project can be fostered by broadening the economic linkages that arise as a consequence of the project's activities in order to meet the challenges of a resource-based economy. There are three types of economic linkages that could be fostered/encouraged around a mining (or natural resource-based) operation in a particular area:

1. Downstream linkages or activities engaged in the further beneficiation or processing of an ore or concentrate.
2. Side stream linkages arising from the supply of local goods and services to operating companies.
3. Geographical linkages. Promoting the development and expansion of such activities provides the basis for the emergence of local clusters of industrial activities which can spin-off into other areas and applications engendering much greater economic benefits for a region in terms of diversification and job creation.

The challenge facing Siyathemba is how to broaden and encourage the opportunity spaces presented by the availability of mineral resources. Mineral-based activities, whether large- or small-scale, have the potential to stimulate economic diversification and industrial development in a region provided a number of issues are borne in mind.

Firstly the overall economic impact of a specific mining or minerals processing project is highly dependent on the fullness and depth of the 'cluster' of activities that form and agglomerate around it. Clustering or linkage development arises both as a direct and indirect consequence of the construction and successful operation of a particular resource-based project. Direct impacts include upstream, side stream and downstream activities. Indirect impacts refer to the broader economic linkages and spin-off effects that are induced in the local economy as a consequence of each of these direct impacts. These include the linkages that arise between the various resource-based projects themselves as well as different sectors in the immediate vicinity of the project and further afield. The scale and depth of clustering that arises as a consequence of indirect impacts is likely to be much more

extensive and the employment multipliers much greater than those arising from direct spinoffs. It is the degree of direct linkage development, therefore, which ultimately determines the long-term maturity and success of clustering around a project and in the local economy. Each direct spin-off from the initial industry provides the impetus for further employment spinoffs either in supporting industries and enterprises or the service sector. These indirect spinoffs, in turn, facilitate the diversification of the economy through the development of additional manufacturing and service activities as employee demands for different products begins to increase.

Secondly, a number of possibilities in side stream and indirect activities exist. 'Side stream' activities refer to the service network, vendors and key contracting firms directly affiliated with a particular mineral project's operations. Not only is this sector significant in terms of contributing to broadening the local employment base and enhancing the potential for further employment spinoffs, but it is of critical importance to the functioning of all departments within a particular mineral-based operation. The 'side stream' sector associated with each mine or processing plant usually comprises vendors of various sizes, providing either hard or soft services.

Hard services are usually production-related activities and plant specific and include:

1. Hard engineering companies
2. Engineering suppliers
3. Construction and manufacturing firms
4. Heavy equipment, industrial and electrical suppliers

While most of these activities are technical in nature and require skills which are largely absent in the area and sourced from outside, there are, nevertheless, a number of areas where SMMEs can be developed as preferred suppliers and establish workshops and facilities in the immediate vicinity of such plants. Such opportunities include:

1. Localisation of spares (conveyors, mechanic al power equipment, motors and generators, bearings, pumps, fasteners, springs etc.)
2. Maintenance facilities
3. Supply of consumables required in the daily operation of the project (chemicals, reagents, etc.).

Soft (non-production) services include:

1. Security,
2. Industrial cleaning and plant hygiene
3. Garden/landscaping
4. Interior plant management
5. Consumables
6. Catering
7. Personal protective equipment
8. Legal/logistic activities
9. Consultants (IT, environmental and industrial)
10. Waste management
11. Painting services, etc.

Such functions offer numerous opportunities for SMME development and economic diversification. Training programmes and apprentice schemes may need to be introduced to improve the skills and capabilities of the workforce to be able to take advantage of and identify new opportunities. Industrial development can also be enhanced by recognising and targeting the indirect activities that are often associated with mineral-based operations.

Various types of indirect impacts generally arise as a consequence of the operation of a resource-based plant (and its downstream operation) at different levels:

1. At the local level, suppliers contracted directly to the resource-based plant will foster additional linkages through interaction with other suppliers of goods and service firms located in the area.
2. Indirect impacts and multiplier effects are enhanced and fostered as a result of an increase in disposable income – a direct impact of employment at the plants and in the supplier network. As the wages and security of livelihoods increases, demand patterns change. A more diversified mix of enterprises providing a range of products and services starts to emerge. Such activities include, inter alia, entertainment, retail, education, care/medical, residential and transport facilities.
3. Clustering and diversification arises from inter-project linkages – i.e. utilisation of inputs, outputs and by-products produced by each mine and processing plant.
4. Another indirect possibility is in encouraging the indirect impacts related to inter-sectoral linkages – i.e. linkages arising between the mining sector and other industrial and economic sectors in the Municipality. Other sectors that stand to benefit from these mineral based projects include transport, construction, Agri- and geological tourism, etc. Close collaboration and interaction between the private and public sector will be critical in order to capitalise on these indirect opportunities.

B. Logistics

The cost and availability of suitable transport systems remain one of the major factors inhibiting the further development of the Mining industry in the Northern Cape Province. It affects both the expansion of the iron mines, as well as the development of new mines, both large and small.

Another possibility arises in looking for ways in which the Municipality can assist in making it financially feasible to beneficiate locally. The beneficiated product would have more value and would require less rail capacity.

C. SMME Support

An association dedicated to the support and development of the SMME side of the minerals industry in Siyancuma is required. In order to optimise the exploration, production and financial aspects of SMME mining, central co-ordination of the efforts of producers must be investigated, as centralised services such as geological consulting, exploration services, mining, legal and financial services. It is impossible to mine without adequate funding; SMMEs should be assisted with issues such as access to capital in order for them to fully optimise their operations.

D. Small Scale Mining Development

The Siyathemba Local Municipality should assist as many small scale operations as possible to get up and running. In some cases, this will involve upgrading of the infrastructure such as roads, in others it could involve research into minerals and their markets or assisting with equipment or accommodation for small projects. In order for this to occur, the Municipality will have to look at the infrastructure, such as roads and ensure that they are in a condition fit for transporting the various mineral products to the market. Housing for lower income groups also needs to be addressed and this may present an opportunity to manufacture bricks locally.

E. Availability of Labour

With high unemployment levels in Siyathemba, there is a large labour pool to generate employment in the Municipality and this labour pool could be incorporated into Mining projects. There is however, a need for skilled labourers and the region has a shortage of

such skills. Big mining companies have to take initiative to train local workers for improvement of skills in the local Mining sector.

3.3.4. Development Potential

The following development opportunities have been identified in the Mining sector of the Siyathemba Local Municipality:

Table 3.2- Mining LED Development Potential

Development Potential
1. Semi-precious stones should be commercially mined and locally beneficiated. 2. Building sand and clay could be mined throughout the area, especially along the Orange River. 3. Locally extracted clay could be used for manufacturing building bricks. 4. A local gemstone beneficiation plant can be refurbished and engaged in production again. This pant could be used to cut and polish locally mined semi-precious stones. 5. The production and packaging of table salt and salt products is a viable option to gain valuable sources of revenue.

3.4. Manufacturing

Manufacturing Sector

The manufacturing sector is broadly defined as the physical or chemical transformation of materials or compounds into new products and can be classified into sub-categories, namely:

1. Food, beverages and tobacco
2. Textiles, clothing and leather goods
3. Wood and paper; publishing and printing
4. Fuel, petroleum, chemical and rubber products;
5. Other non-metallic mineral products, e.g. glass;
6. Metal products, machinery and household appliances;
7. Electrical machinery and apparatus
8. Radio, TV, instruments, watches and clocks
9. Transport equipment
10. Furniture and other manufacturing

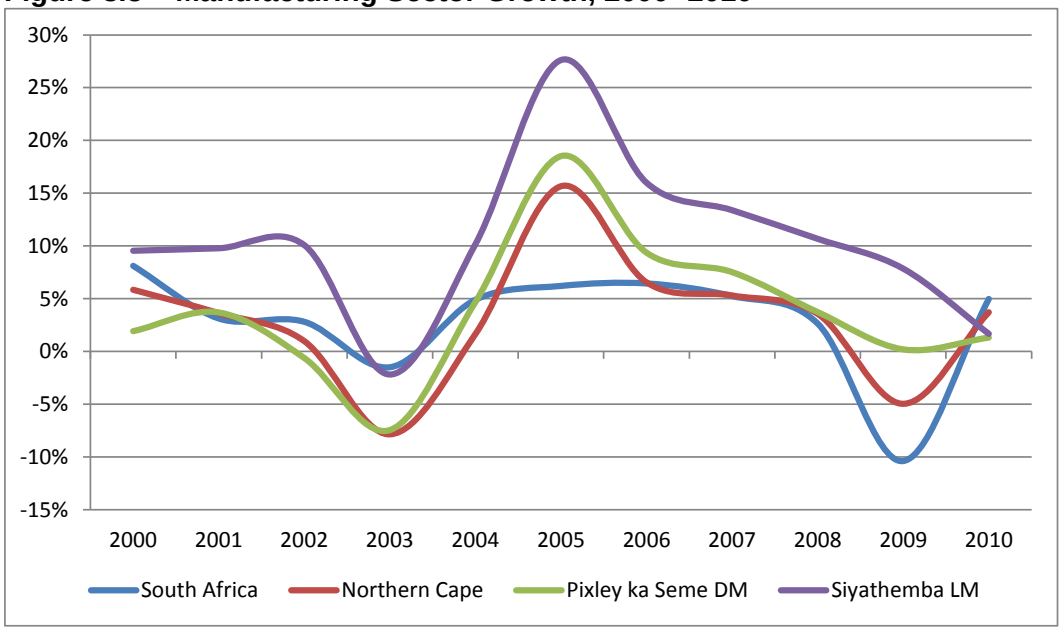
3.4.1. Pixley Ka Seme Overview

The Pixley Ka Seme Manufacturing sector contributed 11.9% to the total GDPR (GDPR at current prices) of the Northern Cape in 2010. Manufacturing in the district has strong links with the Agriculture sector.

3.4.2. Siyathemba Overview

Agro-processing is the main Manufacturing activity in Siyathemba, which consists of the production of various plant and meat products. Figure 3.5 indicates the Manufacturing production growth of Siyathemba from 2000 to 2010 as compared with the District, the Province and South Africa. From Figure 3.5, it is evident that Siyathemba follows a relatively higher production trend to that of the Pixley Ka Seme District's manufacturing sector, except for a decline post-2009.

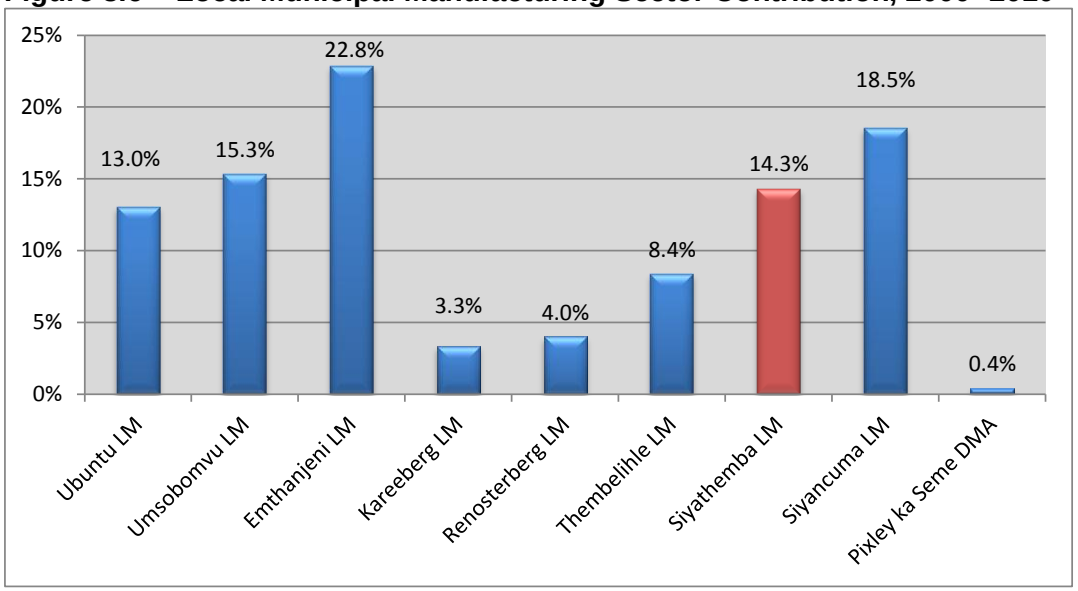
Figure 3.5 – Manufacturing Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.6 indicates the Siyathemba Manufacturing sector's contribution to Pixley Ka Seme District sector as compared to the other Local Municipalities in the region. Siyathemba contributed around 14.3%, which ranks the Municipality fourth, in terms of Manufacturing, in Pixley Ka Seme.

Figure 3.6 – Local Municipal Manufacturing Sector Contribution, 2000- 2010



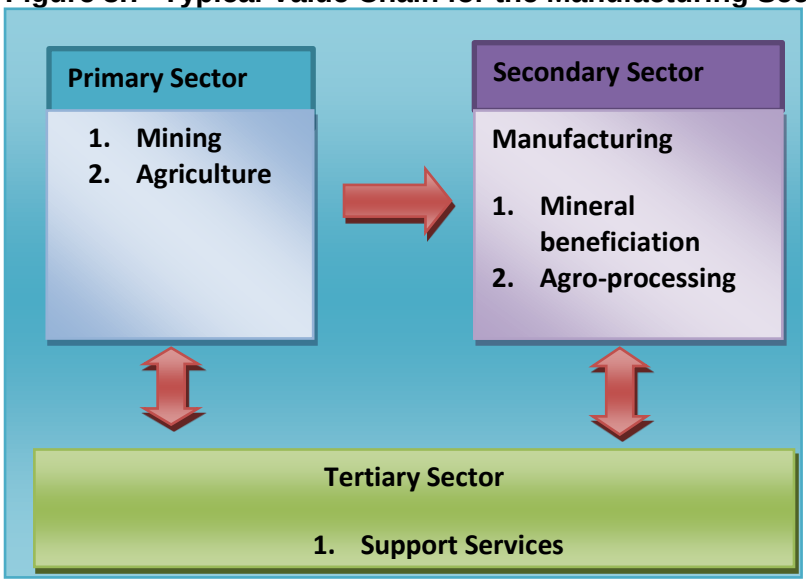
Source: Quantec Research, 2012

3.4.3. Factors in the Analysis of Development Potential

A. Value Chain

The value chain in manufacturing usually progresses from the primary sector to the secondary sector and finally to the tertiary sector. At any stage during a value chain, inputs are required to proceed to the next "phase". This may be in the form of raw materials and goods and services. The various actors interact between the sectors, forming linkages between sectors which play a crucial role in ensuring the sustainability of the manufacturing sector. This interaction essentially relates to a supply and demand side interaction between the role-players. Siyathemba provides opportunities in agro-processing and mineral beneficiation. Although the value chain for the Manufacturing sector is more sophisticated, a simplistic value chain for the sector is depicted in Figure 3.7.

Figure 3.7- Typical Value Chain for the Manufacturing Sector



B. Economic Linkages

Both backward and forward links with agriculture, as well as mining activities have gone largely unexploited, with input materials and machinery largely being imported into Siyathemba and raw products leaving the Municipality, as opposed to significantly more valuable processed products leaving the area.

C. Availability of Labour and Skills

A shortage of critical skills needed within the manufacturing sector, such as technical and artisanal skills, is one of the major development constraints within this sector. This has also been acknowledged as a "binding constraint" within the Manufacturing Sector through development policies, such as the new growth path and IPAP2. This provides an opportunity for Siyathemba to develop a manufacturing skills training centre.

D. Global Market Trends

Reduced trade barriers have created enormous opportunities for producers in South Africa to sell goods and services in other countries. Foreign companies also compete for local consumers' patronage and globalisation also poses a serious threat. Consciously making

environmentally-beneficial decisions has gone from a luxury choice to a necessary one. Over the past decade, 'green' was considered a lifestyle choice adopted by environmentalists, then the affluent, but today it has become a mainstream feature of many products and services.

Green Manufacturing

Green manufacturing has become a powerful marketing tool. Consumers increasingly have begun buying green products that are more cost effective and healthier and leave less of a carbon footprint on our planet. As a result, manufacturers are developing products that fit this need. At the same time they are implementing supply chains that are greener.
The basics of green manufacturing focus on minimizing the impact of the manufacturing process on the environment. It begins with the development of green products and extends to implementing a green supply chain. Once this has been done, green manufacturing can be turned into a marketing advantage. Manufacturers viewed as being green, such as Toyota and General Electric, have converted the concept into more sales. The following are some basic characteristics of green manufacturing:

1. Less consumption of natural resources, such as water and coal.
2. Less energy used in production
3. Less gas and toxic material released into the environment
4. Less waste created from the manufacturing process

Product development studies show that the design stage determines 70% of a product's environmental impact. Biodegradability results in a substantial savings for many local communities that pick up green waste. If customers gather leaves and such into plastic bags, the garbage company has to remove all the bags, which is costly. With the biodegradable garbage bag, everything can be composted together, and that translates into huge savings.

Green Supply Chain

To be successful, green products require a green supply chain. Supply chains involve everything from the purchase of production materials to the delivery of the finished product to the customer. This means every aspect of a business needs to adopt a green approach. To make this happen, manufacturers need to implement an overall green strategy. [1]

E. Niche Markets

A niche market is a focused targetable segment of a market. A business that is focused on a niche market is usually offering a product or service that is not being addressed by mainstream providers. In other words a niche market is a narrowly defined segment of potential customers.

Niche markets are typically ignored by large businesses because the market is too small to be interesting or to make their economies of scale effective. Niche markets are therefore ideal for small, specialised businesses. That is because these small specialised businesses can generally charge a premium or enjoy the benefit of little (or even no) competition. Siyathemba has the opportunity to manufacture and package "niche" agricultural products for markets in Gauteng and the rest of the country.

[1] Source: All Business, Green Manufacturing – Supply Chains and Marketing (www.allbusiness.com)

F. Technology Change

The world of manufacturing has reached a turning point because of the influence and impact of Technology. Manufacturing information systems today support the production functions of companies. Production functions include the activities concerned with planning and control of the processes used in producing goods and services. Computers are at the root of these processes. Computer-based manufacturing information systems use several major techniques to support Computer-Integrated Manufacturing (CIM). Benefits of CIM systems include:

1. Increased efficiency through work simplification and automation
2. Improved utilization of production facilities
3. Reduced investment in production inventories using Just-In-Time practices
4. Improved customer service.
5. Improving Information Technology.

G. Enabling Environment

The following factors should be taken into account when accessing the readiness, or enabling environment of an area:

1. The quality and extent of hard infrastructure such as road and rail networks.
2. The sophistication of local telecommunications, banking and finance services similarly impact on the input and operational costs of doing business.
3. The extent to which spatial and land planning policies and documents are flexible to the needs of businesses and the relative ease of following land planning processes, such as rezoning applications.
4. The sophistication of the public sector.
5. The quantity and quality of available labour and training programmes, in relation to the specific human resource requirements of investors.
6. Quality of life factors, such as the supply of housing and personal lifestyle facilities (such as educational, cultural and recreational services) also have an impact on the attraction of particular investment.

3.4.4. Development Potential

The following development opportunities have been identified in the Manufacturing sector of the Siyathemba Local Municipality:

Table 3.3- Manufacturing LED Development Potential

Development Potential
1. The opportunity exists to establish an agro-processing plant in Prieska, thereby beneficiating produce from the agriculture sector. 2. Investment in a local recycling plant (paper, plastic and glass) provides a good opportunity to expand job creation. 3. The implementation of training and skills development programmes in local communities (focussed on the youth). 4. The local production of solar panels that could supply the Utilities sector of the Northern Cape. 5. The production of local Arts & Crafts (such as bead work) for the tourism market will provide much needed revenue to the area. 6. Investment in a local leather tannery, cotton gin, game abattoir and a chicken broiler house will provide opportunities for beneficiation of agricultural produce. 7. Investment in a construction equipment plant will expand manufacturing opportunities, as well as provide for skills development in the area.

3.5. Retail and Wholesale Trade

Retail and Wholesale Trade Sector

This sector is defined as the resale (sale without transformation) of new and used goods to the general public for personal or household consumption or use by shops, department stores, stalls, mail-order houses, hawkers and peddlers, consumer cooperatives, etc.

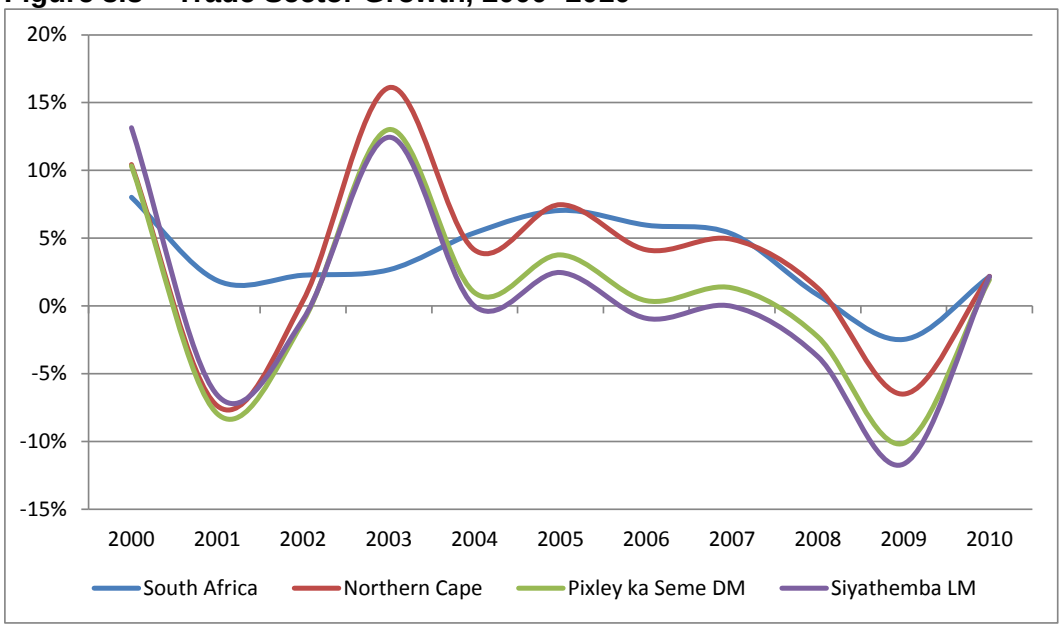
3.5.1. Pixley Ka Seme Context

The Trade sector in Pixley Ka Seme contributed 12.1% to the total District GDPR in 2010 (GDPR at current prices). This District contributed 12.6% to the Northern Cape Wholesale and Retail Trade Sector, overall.

3.5.2. Siyathemba Context

Figure 3.8 indicates the Wholesale and Retail Trade Sector production growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. From Figure 3.8 it is apparent that Siyathemba experienced a slightly lower production trend to that of the Pixley Ka Seme District's Trade sector, however the sector showed positive growth in 2010.

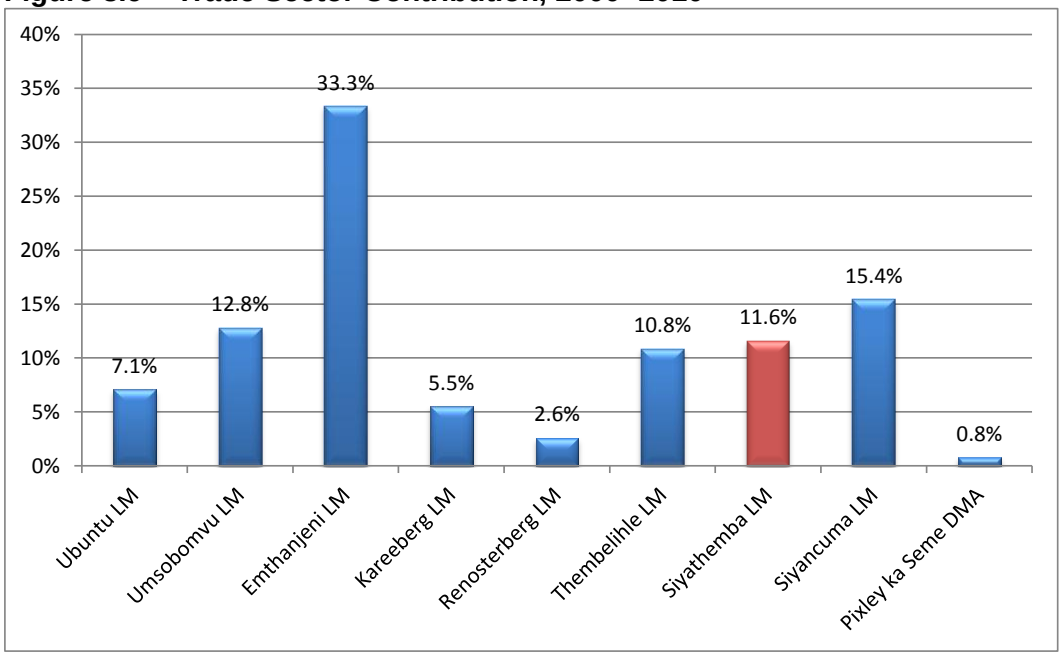
Figure 3.8 – Trade Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.9 indicates the Siyathemba Wholesale and Retail Trade sector's contribution to the Pixley Ka Seme District sector as compared to the other Local Municipalities in the region. Siyathemba contributed around 11.6%, the fourth ranked Municipality, in terms of Trade in Pixley Ka Seme.

Figure 3.9 – Trade Sector Contribution, 2000- 2010



Source: Quantec Research, 2012

Table 3.4 indicates the expenditure profile of Siyathemba and indicates the demand for various Trade categories. Food and beverages made up 26.0% of household expenditure in Siyathemba, followed by rent for accommodation at 14.6%.

Table 3.4- Main Expenditure Categories

Household Expenditure Category	%
Furniture, household appliances, etc.	1.1%
Personal transport equipment	3.7%
Recreational and entertainment goods	1.8%
Other durable goods	0.6%
Clothing and footwear	4.1%
Household textiles, furnishings, glassware, etc.	1.0%
Motor car tyres, parts and accessories	1.2%
Recreational and entertainment goods	1.0%
Miscellaneous goods	0.6%
Food, beverages and tobacco	26.0%
Household fuel and power	3.0%
Household consumer goods	3.7%
Medical and pharmaceutical products	2.0%
Petroleum products	3.1%
Recreational and entertainment goods	0.8%
Rent	14.6%
Household services, including domestic servants	2.8%
Medical services	6.5%
Transport and communication services	9.1%
Recreational, entertainment and educational services	4.0%
Miscellaneous services	9.3%

Source: Quantec Research, 2012

3.5.3. Development Potential

The following development opportunities have been identified in the Wholesale and Retail Trade sector of the Siyathemba Local Municipality:

Table 3.5- Wholesale and Retail Trade LED Development Potential

Development Potential
1. There may be opportunities to invest in a new small grocery shop and restaurant in Prieska. 2. Railway infrastructure should be restored and placed back into operation to reduce the cost of bulk transport. 3. Training and registration assistance should be provided to construction workers. This initiative must be aimed at placing these workers in a position where they can operate their own businesses and tender for government contracts. 4. Entrepreneurship training and development programmes should be implemented in local communities to facilitate the development of SMMEs.

3.6. Tourism

Tourism Sector

Tourism is not an economic sector on its own, but forms part of other economic sectors especially the Trade, Transport and Finance sectors. However, due to its increasing importance as an income and employment generator in South Africa, it is believed that this sector should be discussed separately from the other sectors.

3.6.1. National and Provincial Context

Domestic tourism is a significant contributor to the tourism industry that often receives less attention than international tourism. In South Africa, domestic tourism contributes significantly to the tourism sector, accounting for 79% of total tourism in 2010. However, it contributed only 23% to total tourism revenue in the same year. The total number of trips taken in South Africa has decreased by 600 000, while the number of travelling adults decreased by 1.2 million. This implies that the average number of trips taken per traveller has increased.[2]

3.6.2. District and Local Context

The town of Prieska is located on the south bank of the Orange River at the foot of the Doringberg, it was originally named Prieschap, a Khoisan word meaning 'place of the lost she-goat'. The site of the town, founded in 1882 and renowned for its semiprecious stones, was a fording place used by early travellers[3].

The following are the main Tourism attractions in the region:

1. Die Bos Nature Reserve
2. British Fort
3. Green Valley Nuts
4. The Oranjezicht and T'Keikamspoort Hiking Trails
5. Khoisan Rock Art
6. Memorial Garden
7. Prieska Museum
8. Ria Huysamen Aloe Garden
9. Schumann Rock Collection
10. Wonderdraai Island

[2] 2010 Annual Tourism Report – South African Tourism, 2011
[3] Northern Cape Tourism

3.6.3. Development Potential

The following development opportunities have been identified in the Tourism sector of the Siyathemba Local Municipality:

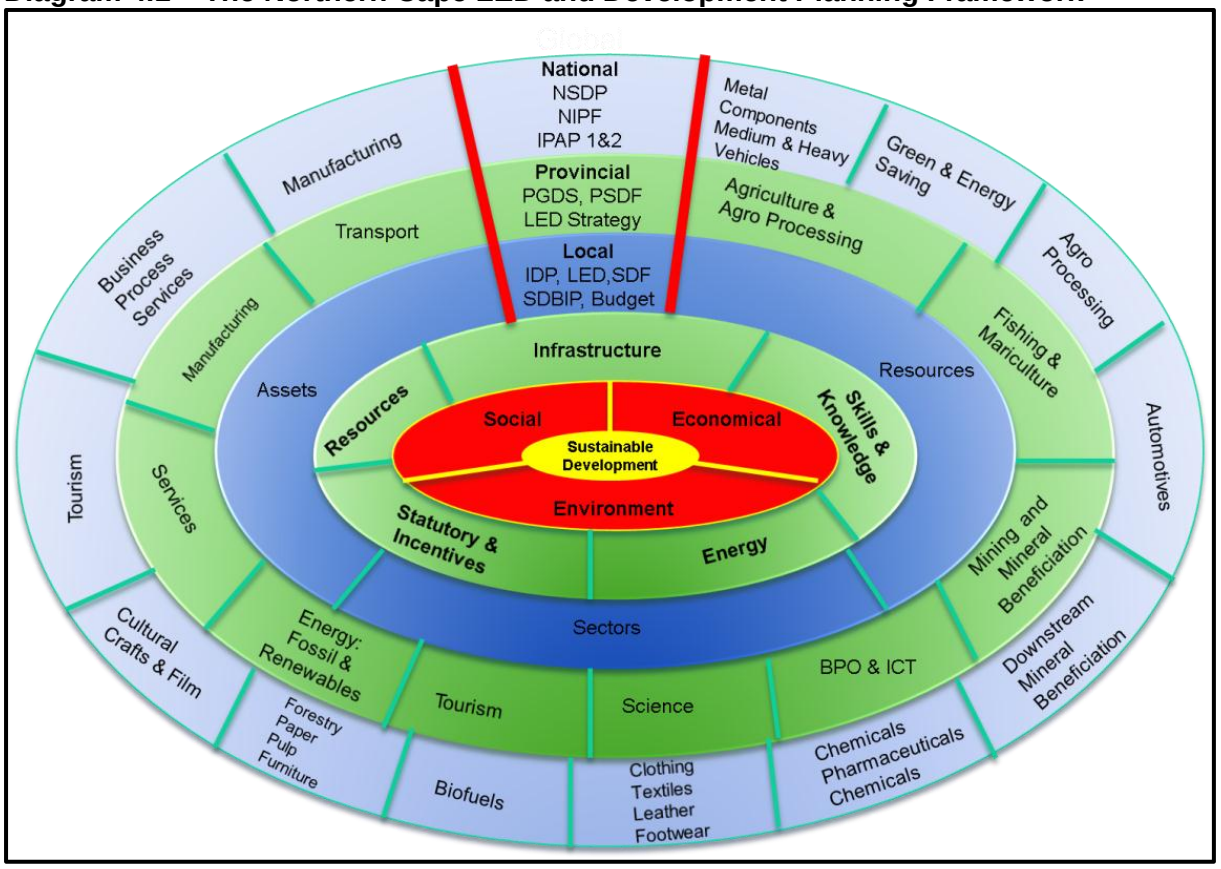
Table 3.6- Tourism LED Development Potential

Development Potential
1. Resort and adventure tourism along the Orange River will result in enticing tourists to explore the region for longer and staying for lengthier periods of time. 2. The “Die Bos” area could be developed into a tourism resort with associated adventure tourism activities, such as water sports and hiking. 3. Expanding the game tourism and hunting industry can enhance the eco-tourism profile of the region. 4. Mineral processing tourism can become an inviting prospect for visitors. If the old gemstone processing plant can be renovated, it could also become a popular tourist destination. 5. A local attraction known as “Die Koppie” could facilitate local festivals. 6. The area should develop a unique tourism brand of its own and marketed on various platforms. 7. Investment in a new casino near Prieska may attract travellers from all over. 8. The re-routing of the N10 highway through Prieska will provide tourists the opportunity to appreciate the town and view it as a stop-over or destination on its own.

SECTION 4: LED Framework

This Section presents the LED Framework and a review of the LED opportunities that have been identified, as well as potential development projects that may be associated with these opportunities. The projects will subsequently be submitted and prioritised according to their economic impact on the area and then packaged to produce a descriptive overview.

Diagram 4.1 – The Northern Cape LED and Development Planning Framework



Source: Northern Cape Department of Economic Development and Tourism

Diagram 4.1 presents the Northern Cape LED and Development Planning Framework. This Framework is vitally important and will be applied to the outcomes of the situational analysis. Important in this regard is to interpret the findings of the Opportunity Analysis in terms of:

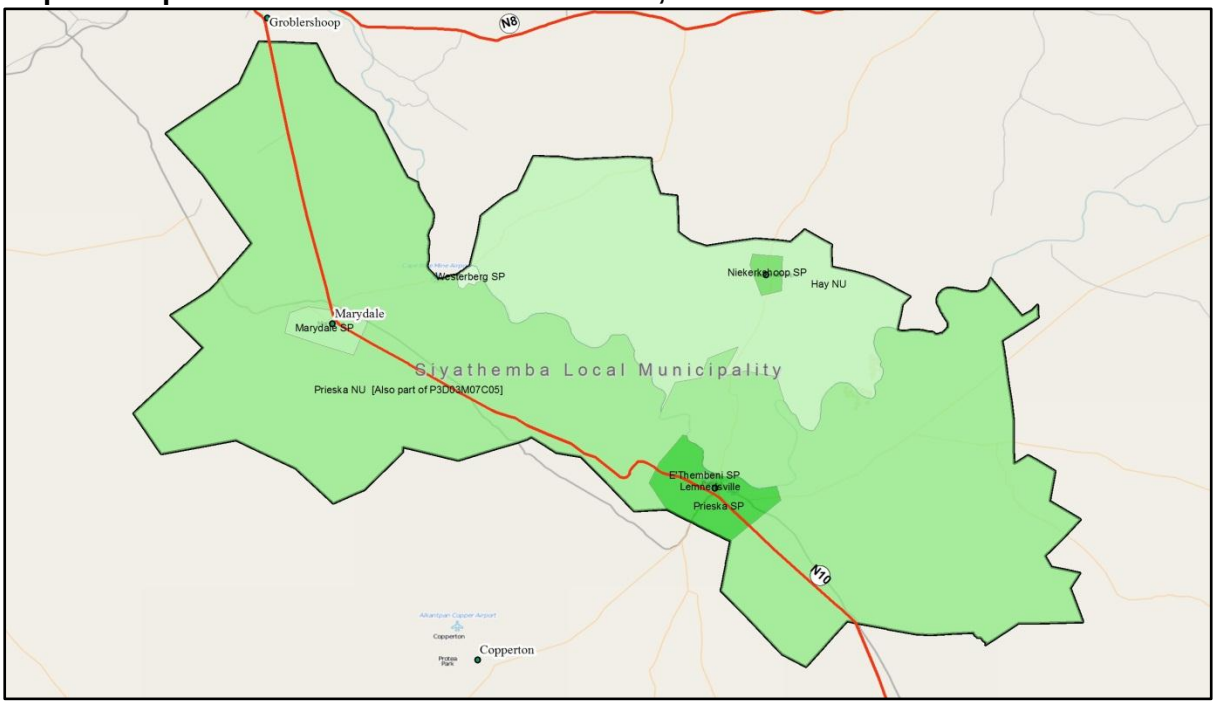
- Available skills and knowledge
- Available energy
- Available development incentives
- Available primary resources

4.1. Local Development Context

4.1.1. Availability of Skills & Knowledge

The spatial distribution of skilled labour in the Municipal area is illustrated by Map 4.1 and Table 4.1. The total number of workers in the Municipal area remained between 4,000 and 5,000 between 2001 and 2010.

Map 4.1 – Spatial Distribution of Skilled Labour, 2010



Source: Spatial projections based on Census 2001 and Quantec Research 2012

From this total, the number of *highly skilled* workers in the area increased from 389 in 2001 to 467 in 2010, while the number of *skilled* workers remained at about 1,500 to 1,700. Most skilled and highly skilled workers in the area can be found in Prieska and its surrounding areas.

Table 4.1 – The availability of Skills within the Local Municipality, 2010

Sub-Place	Highly Skilled			Skilled			Semi- and -unskilled		
	2001	2010		2001	2010		2001	2010	
E'Thembeni SP	33	31	(↘)	156	211	(↘)	294	344	(↗)
Marydale SP	45	43	(↘)	82	111	(↗)	106	124	(↗)
Niekerkshoop SP	36	34	(↘)	162	219	(↗)	89	104	(↗)
Prieska SP	221	210	(↘)	357	484	(↗)	178	208	(↗)
Lemnertsville	91	86	(↘)	316	428	(↗)	446	522	(↗)
Hay NU	3	3	(→)	38	51	(↗)	183	214	(↗)
Prieska NU [Part of P3D03M07M05]	62	58	(↘)	102	139	(↗)	468	548	(↗)
Westerberg SP	1	1	(→)	1	1	(→)	1	1	(→)

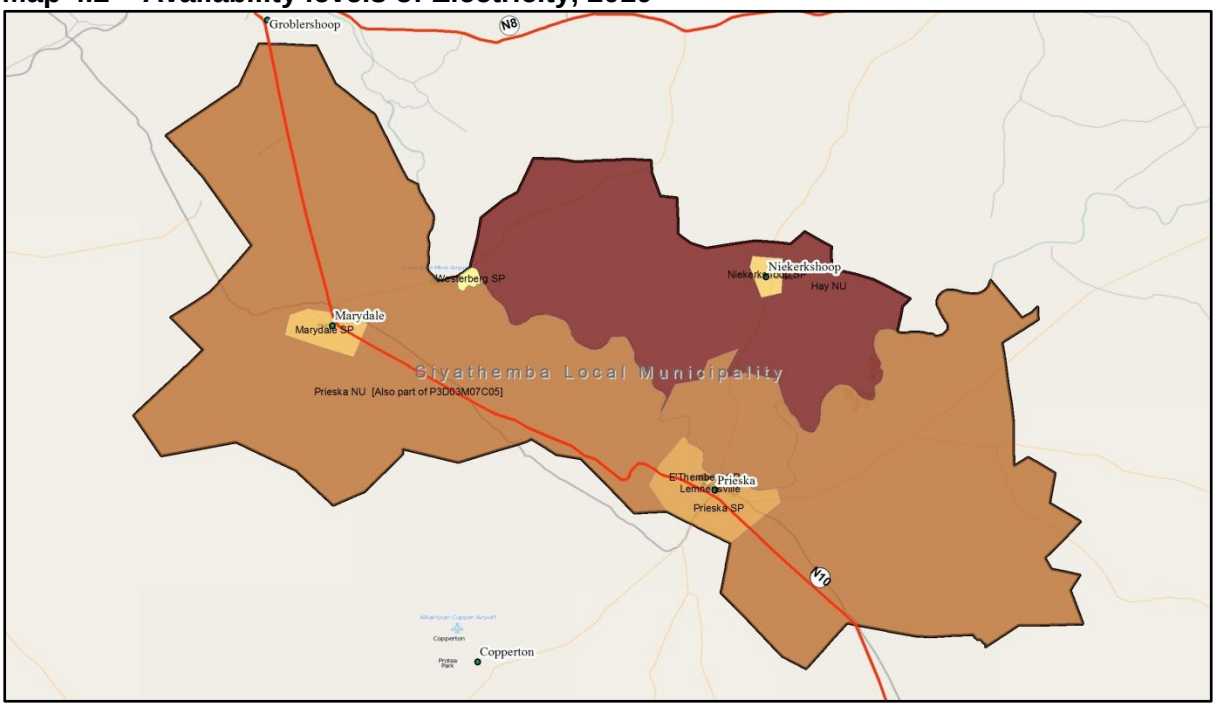
Source: Spatial projections based on Census 2001 and Quantec Research 2012

Among the highly skilled group, most workers could be classified under the occupation group *technicians and associate professionals.* This was true for *craft and related trades* workers under the skilled group. Almost 50% of workers were regarded as semi- to unskilled during 2010.

4.1.2. Available Energy

The level of electricity availability is illustrated by Map 4.2 and Table 4.2. It was estimated that some 85% to 90% of households in the Municipal area had access to electricity during 2010.

Map 4.2 – Availability levels of Electricity, 2010



Source: Spatial projections based on Census 2001 and Quantec Research 2012

Most households in Niekerkshoop have access to electricity, while the urban areas of Prieska and Marydale have limited access. The rural areas outside Niekerkshoop have the lowest levels of electricity access in the area.

Table 4.2 – Access to Electricity within the Local Municipality, 2010

Sub-Place	Number of Households		Level of Access
	2001	2010	
E'Thembeni SP	585	790	75.9%
Marydale SP	412	556	84.2%
Niekerkshoop SP	399	539	90.9%
Prieska SP	520	702	82.1%
Lemnertsville	1165	1 574	96.4%
Hay NU	88	119	58.6%
Prieska NU [Part of P3D03M07M05]	393	531	80.2%
Westerberg SP	1	1	100.0%
Total	**3561**	**4 812**	**85.2%**

Source: Spatial projections based on Census 2001 and Quantec Research 2012

The level of household access to electricity has improved slightly from 85.4% in 2001 to over 87% during 2010. Most farms in the area procure their electricity directly from ESKOM.

4.1.3. Development Incentives

The Local Municipality does not currently offer any local investment incentives to potential developers. Although Municipalities in South Africa are legally not allowed to provide discounts on VAT or other national taxes, it is recommended that Ubuntu consider the following types of incentives to encourage local development:

Infrastructure
Infrastructure concessions often involve the provision of serviced industrial and commercial sites or special efforts to develop infrastructure and services in selected commercial areas in response to the needs of prospective investors. The implications of these infrastructure concessions are that the investor will be attracted, if the local authority is flexible and sensitive in amending its development/delivery schedule to accommodate the investors' needs.

Land and Buildings
An incentive package of this type may involve the sale, transfer or rental of land, buildings or other facilities owned by the local authority on concessionary terms in order to attract investment. This further implies assistance by the local authority in order to obtain premises. However, if the local authority intends making some of its own assets available, they must ensure that they are in compliance with National and Provincial legislation on the disposal of public assets (e.g. the Public Finance Management Act)

Regulatory reform
These concessions involve special efforts by the local authority to reduce constraining regulation and zoning that may stand in the way of potential business development. This aspect implies an accurate and speedy system to supply information relating to, and the approval of potential investment. In this regard the fast tracking of re-zoning applications and the issues of zoning certificates are very important.

Finance
Some international cities provide financial assistance in the form of special grants, access to start-up capital, bridging finance and credit, loan guarantees or the underwriting of risks. However, South African local authorities are currently prohibited from undertaking in these activities. The Municipality's LED Unit should however, have a database of "funders on hand" (including their qualifying criteria) to assist investors and make meaningful recommendations. This is especially with regards to local entrepreneurs and SMMEs.

Approval process
One of the most basic incentives involves facilitating prompt decisions such as the approval of building plans and re-zoning applications. Prospective investors will lose interest if local authorities take too long to approve plans and applications. The establishment of a one-stop centre could facilitate this process more efficiently and would go a long way to provide a convenient and professional service to potential investors and developers. This centre must be well marketed and its services integrated with other support institutions (such as SEDA).

4.1.4. Available Primary Resources

Based on the Agricultural Census of 2007 by Statistics South Africa, various planted and animal commodities were produced in the area. Table 4.3 illustrates planted crops being cultivated in the area.

Table 4.3 – Planted crops within the Local Municipality, 2007

Planted Crop	Production (t)	Income (R)
Maize	87 869	95 208 000
Wheat	51 226	75 605 000
Barley	1 225	2 412 000
Groundnuts	801	2 772 000
Potatoes	19 098	36 800 000
Onions	4 620	7 113 000
Wine grapes	2 552	7 547 000
Total	**167 391**	**227 457 000**

Source: Agricultural Census of 2007 by Statistics South Africa

From this Table, it is evident that the area made a significant contribution to crop production in the Northern Cape, with reference to maize and wheat, as well as various other crops. These commodities generated a total farm income of more than R227 million during 2007, of which the sale of maize and wheat made the largest contribution.

Livestock production also made a significant contribution to the Agriculture sector of the Municipality (see Table 4.4).

Table 4.4 – Livestock production within the Local Municipality, 2007

Livestock	Total on Farms	Sold	Income (R)
Cattle	6 209	3 475	11 478 000
Sheep	159 141	87 678	46 131 000
Goats	4 939	5 003	1 702 000
Game	Unknown	187	322 000
Total	**170 289**	**96 343**	**59 633 000**

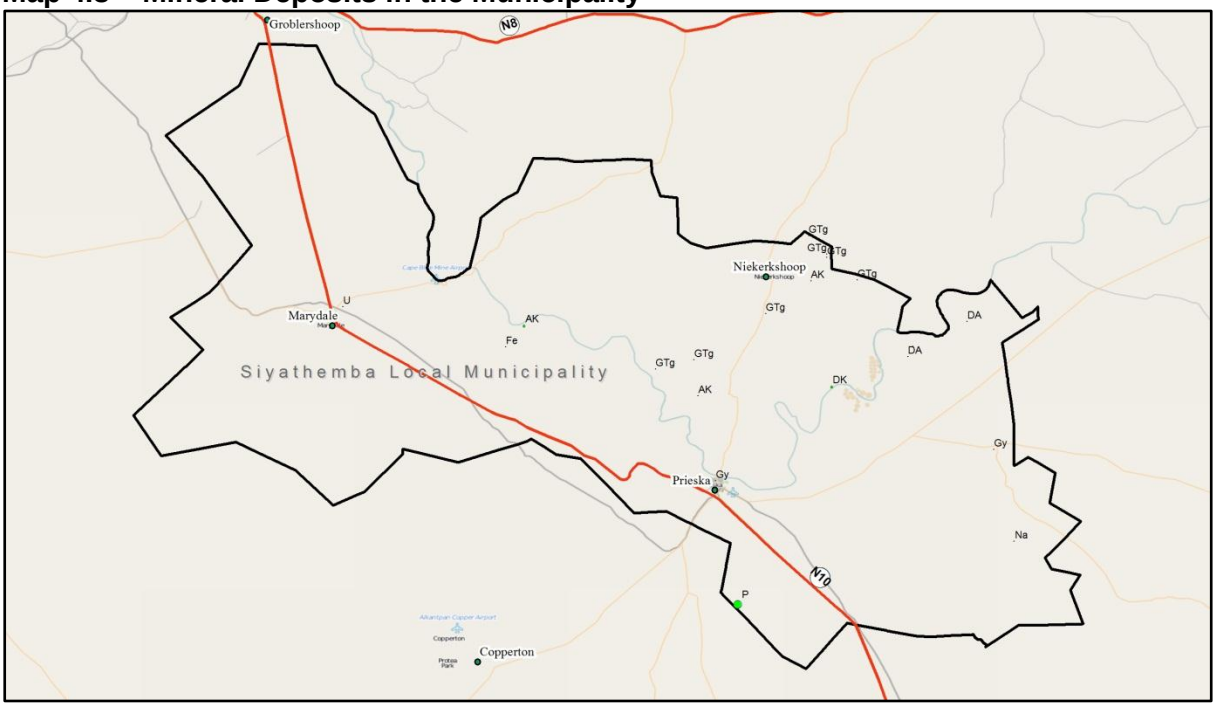
Source: Agricultural Census of 2007 by Statistics South Africa

Although livestock farming does not contribute as much to farming income when compared to crop production, the sale of animals did contribute almost R60 million to local Agriculture. From this total, the sale of sheep was the most significant. During 2007, there were almost 200,000 animals in total on local farms.

Agro-processing also contributed to the local economy during 2007. During this year some 38112 litres of milk and cream were sold, as well as 77,965 kilogram of wool.

Mineral deposits found in the Municipal area are depicted by Map 4.3.

Map 4.3 – Mineral Deposits in the Municipality



Source: Council for Geoscience

From this Map the following observations can be made:

- Generally, the area does not have any significant mineral deposits.
- To the south of Prieska, on the farm Doornfontein, a medium-sized mineral deposit of Phosphate can be found.
- Various small mineral deposits can be found near Niekerkshoop. These include Tiger's-eye and Crocidolite (Asbestos).
- Small deposits of Alluvial Diamonds can be found in the Orange River.
- Other small mineral deposits within the Municipal boundary include Salt, Gypsum, Iron and Uranium.

4.2. Strategic Vision for Local Economic Development

The purpose of this Sub-section is to present the Strategic Development Pillars for the local economy of Siyathemba. The Development Pillars are now presented as the core of the Siyathemba LED Strategy. These "LED drivers" also serve as points of alignment with the relevant development policies.

The goal of LED in the Municipality was packaged (Section1) into the following Vision Statement:

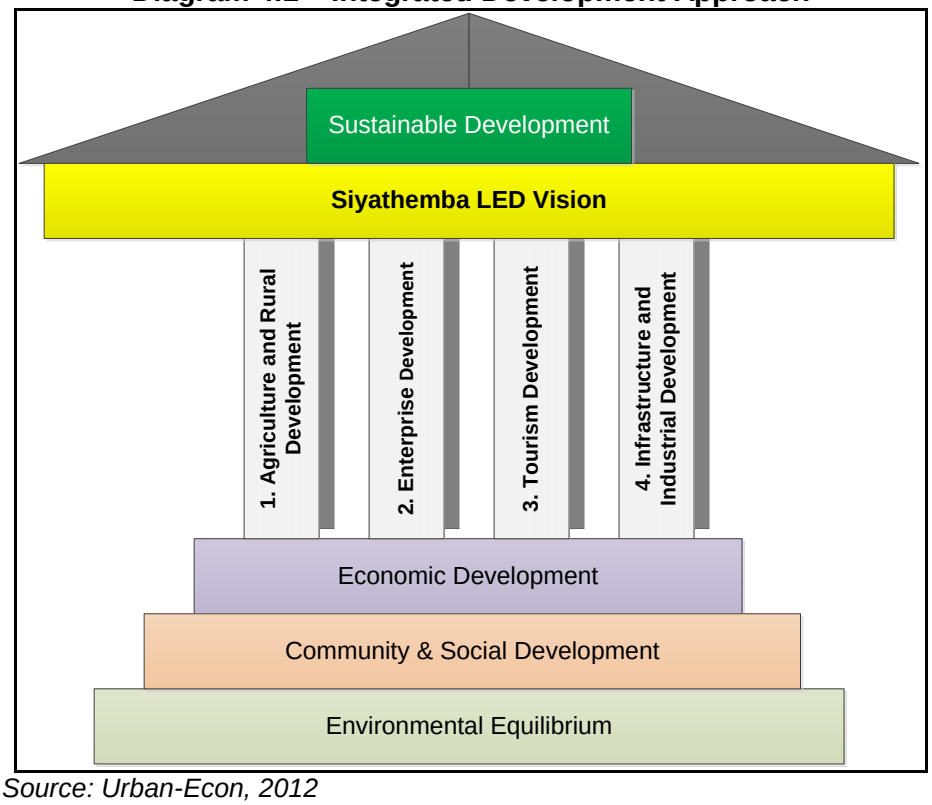
"Ensuring long term economic sustainability through local value addition and social upliftment, as well as integrated community development. We strive towards an economy owned by local people."

This vision sets the tone for the LED Strategy and provides guidance for its Implementation Plan towards a future desired by local communities.

4.2.1. Development Pillars

From a strategic development facilitation point of view, it is necessary to ensure that the appropriate linkages and interactions between projects and actions be established. Such an integrated approach is needed to ensure the optimal rate of implementation and economic development in the area.

Diagram 4.1 – Integrated Development Approach



Source: Urban-Econ, 2012

The integrated approach for stimulating economic growth and development within Siyathemba is illustrated in Diagram 4.1. Based upon this Figure, there are **four main Strategic Development Pillars** for stimulating growth and development within the Siyathemba economy.

These Development Pillars are based on the situation experienced within the Siyathemba local economy and aim to utilise existing strengths and opportunities by transforming these into workable programmes and actions that will assist in reducing threats and alleviate weaknesses in the local economic environment.

4.2.1.1. Pillar 1: Agriculture and Rural Development

There is a growing need to solve a host of problems faced by the Agriculture sector in Siyathemba in a more integrated manner, within the framework of sustainable development. Rural and inclusive development strategies in the past have moved between maximising growth through promoting commercial crops and emphasising food production / self – sufficiency on one hand and import substitution on the other. There are, however, various recommended programmes to improve this sector:

Agribusiness may be defined as all market and private business–oriented entities involved in the production, storage, processing and distribution of agro–based products, in the supply of production inputs and in the provision of services. Agribusiness is an integral component of rural development and forms part of the strategy to improve regional and local economic development and ensure food security.

Agribusiness enterprises are primarily labour-intensive small and medium sized enterprises located near agricultural production sites in rural areas or in rural centres, such as Siyathemba. Economic success of these agricultural enterprises is increasingly determined by the performance and capacity of upstream and downstream sectors. Agribusiness entities need to respond by improving their efficiency and market orientation. What is required in agribusiness is access to expertise, the availability of market information and sufficient management skills.

Agribusiness support in itself must be an integral part of the LED and must be targeted towards the creation of jobs and income in Siyathemba. In line with a common business concept, the guiding principle is always the market orientation of all support services. Employment promotion and poverty alleviation in rural areas are additional goals of promoting agribusiness. Agribusiness does not only focus on the primary production of products, but also requires additional workers. New employment opportunities are created in the processing industry and, especially, in the service sector.

The following Programmes were identified in Siyathemba:

1. Agro-Processing
2. Emerging Farmer Support

4.2.1.2. Pillar 2: Enterprise Development

Enterprise support systems are a critically important aspect of local economic development due to this sector's employment creation characteristics. This Development Pillar's main focus is to establish and expand Enterprise Development in Siyathemba. Thus, the Pillar has a dual aim, including:

- The support of SMMEs (existing and newly emerged).
- The development of new Enterprises

Therefore, the objective of this Pillar is to facilitate the establishment of new enterprises, to provide support during the initiation phases of establishment and to provide sustainable information and support for new and existing enterprises within the Municipal area.

The strategic focus of this Pillar is on the following areas:

- The efficient utilisation of government programmes aimed at Enterprise Development
- Networking and matchmaking
- Development assistance provision to the enterprise sector
- Channelling of information

The following Programme was identified in Siyathemba:

1. Investment Promotion and Development
2. SMME and Entrepreneurial Support

4.2.1.3. PLAN 3: Tourism Development

There are many definitions and descriptions of tourism. While some specialists restrict tourism to trip distances (i.e. over 50 or 100 km from home), others require that a person stay overnight to be counted as a tourist. More traditional definitions include only vacations or pleasure trips. Today, however, the trend is to use tourism and travel as synonymous terms. Probably the best working definition is:

"Tourism is the temporary movement of people to destinations outside their normal places of work and residence, the activities undertaken during their stay in those destinations and the facilities created to cater to their needs."

This broader definition does not only include leisure tourism but also business and even medical tourism.

Tourism products and their foundations are far more perishable than manufactured products. For example, if a manufacturer of gearboxes discovered that the demand for the product has increased in a certain region the manufacturer can supply products to those areas. However, when a new hotel is developed in a region and a large capital investment was made and the travel market decides to go elsewhere, it is costly, if not impossible to move.

The following Programme was identified in Siyathemba:

1. Improving the Tourism Profile

4.2.1.4. PLAN 4: Infrastructure and Industrial Development

The concept of Infrastructure and Industrial Development Promotion, in the case of Siyathemba, refers to the expansion of current business and industrial activities, improved local networking and optimising the use of local resources and assets, such as industrial areas and serviced business properties. Broadly, this implies the attraction of new investment to Siyathemba, retaining existing businesses and industries and encouraging local capital to invest locally.

The Infrastructure and Industrial Development Plan are based upon the creation of a vibrant, diversified and sustainable economic development base for investment in Siyathemba, which includes the mining sector. This, however, requires strong, visionary leadership and cooperation between the various LED role players of Siyathemba to effectively link local and regional opportunities, markets and technology and entrepreneurship to potential investors (also referred to as investment matchmaking). This necessitates the establishment of a

representative and efficient LED Forum in Siyathemba which represents both local government and the private sector.

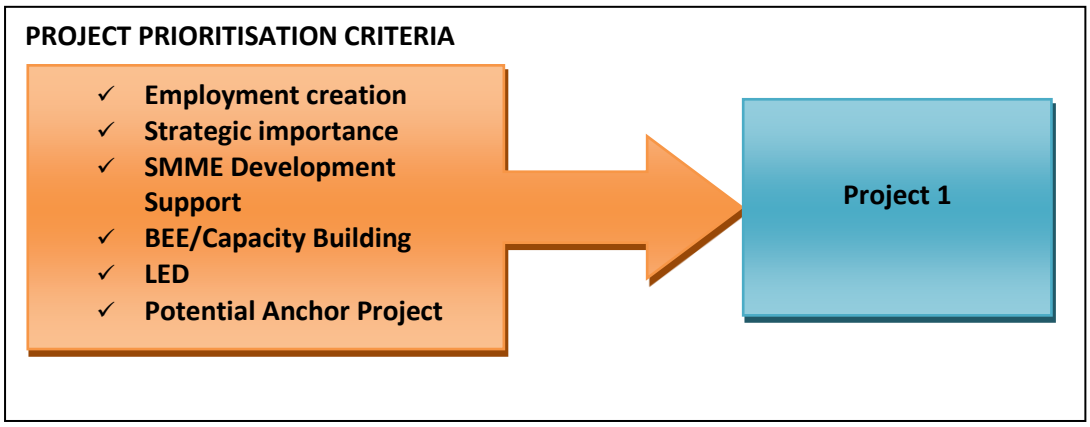
The following Programme was identified in Siyathemba:

1. Industrial Diversification and Infrastructure Development

4.2.2. Project Identification and Prioritisation

In order to determine which of the identified LED projects and initiatives will have the highest impact on the local economy in terms of job creation, capacity building, social upliftment, etc., it is important to prioritise these projects according to a specific set of criteria. This will also facilitate the selection process of strategic anchor projects for Siyathemba. Figure 4.2 indicates the six criteria that are used to prioritise planned projects and other LED initiatives.

Figure 4.2 - Prioritisation criteria



Anchor projects are those projects that consist of a number of linkages to various other sectors and projects. It is important to note that in most instances, anchor projects are also referred to as primary projects, because without the successful implementation of the primary projects, and delivery of primary products there can be no secondary projects, such as processing (value-adding to the product), or trade of the finished product/goods.

The following Pillars, Programmes and Projects have been prioritised accordingly and are indicated in Annexure A:

Pillar 1: Agriculture and Rural Development

Programme 1: Agro-Processing

- Maize & Wheat Mill
- Dairy Processing & Packaging
- Wool Production
- Production of essential oils
- Extensive Irrigation Crop Farming along the Orange River

Programme 2: Emerging Farmer Support

- Mentorship Programme in association with commercial farmers
- Demonstration of new farming methods and technologies
- Establishment of an agricultural college in near Prieska

- Availing farm land for emerging farmers
- Goat meat processing and packaging

Pillar 2: Enterprise Development
Programme 1: Investment Promotion and Development

- Development of serviced business plots for retail and industrial development (especially in Prieska)
- New small grocery shop and restaurant development
- Construction equipment sales and rental

Programme 2: SMME and Entrepreneurial Support

- SMME Training Centre
- Availing suitable business plots for informal traders
- Development and implementation of appropriate town planning regulations for small businesses in the area

Pillar 3: Tourism Development

Programme 1: Improving the Tourism Profile

- Resort and adventure tourism along the Orange River
- New Casino Development (Prieska)
- Game Reserve Development
- The development of an annual festival at “Die Koppie” or "Die Bos"

Pillar 4: Infrastructure and Industrial Development

Programme 1: Industrial Diversification and Infrastructure Development

- Local Recycling Plant (paper, plastic and glass).
- Brick Manufacturing Plant
- Semi-precious stones beneficiation hub
- Building sand quarry
- A local Gemstone Beneficiation Plant
- The processing of salt

4.3. Policy Alignment

In recent years there has been a major thrust to establish developmental state through a reform of the country’s government system. It is by now a norm that local government has a critical role to play in re-building local communities and environments as the basis for promoting effective service delivery, the creation of integrated cities, towns and rural areas as well as the promotion of local economic development.

Coupled to this, a significant number of policy and legislative measures have been adopted in order to facilitate the creation of developmental government and an efficient and integrated planning and development systems.

4.3.1. New Growth Path

The New Growth Path's (2010) main focus areas are to create decent work opportunities, reducing inequality and to end poverty in South Africa. Government aims to achieve this through a New Growth Path founded on a restructuring of the South African economy to achieve labour absorption and a steady economic growth rate. Government is committed to forging such a consensus and leading the way by:

1. Identifying areas where employment creation is possible on a large scale as a result of substantial changes in conditions in South Africa and globally.
2. Developing a policy package to facilitate employment creation in these areas, through:
    a. A comprehensive drive to enhance both social equity and competitiveness;
    b. Systemic changes to mobilise domestic investment around activities that can create sustainable employment; and
    c. Strong social dialogue to focus all stakeholders on encouraging growth in employment-creating activities.

The New National growth Path incorporates the Industrial Policy Acton Plan (IPAP2) and various other policies, programmes and strategies. The aim of the New Growth Path is to ultimately create a more developed, democratic, cohesive and equitable economy and society in South Africa.

Achieving the New Growth Path requires that certain key trade-offs' be addressed. This will put emphasis on government's prioritisation to support employment creation, equity and the directions business must move to facilitate a growing economy.
Some key trade-offs include:

1. Between present consumption and future growth, since that requires higher investment and saving in the present;
2. Between the needs of different industries for infrastructure, skills and other interventions;
3. Between policies that promise high benefits but also entail substantial risks, and policies that are less transformative and dynamic but are also less likely to have unintended consequences;
4. Between a competitive currency that supports growth in production, employment and exports and a stronger rand that makes imports of capital and consumer goods cheaper; and between the present costs and future benefits of a green economy.

Implications of the New Growth Path

Achieving enhanced economic growth and to create new employment opportunities in the Municipality will be the main implication of the New Economic Growth Path. This will be accomplished in the Municipality through:

1. Enhancing social equity
2. Encouraging competitiveness
3. Mobilising domestic investment
4. Stakeholder participation

The New Growth Path will especially be applicable in the following key areas in the Municipality:

1. Agriculture and agro processing
2. Trade and Business
3. Tourism

4.3.2. The Industrial Policy Action Plan (IPAP2)

The major weakness identified in South Africa's long-term industrialisation process is that the decline in the share of employment in the traditional tradable sectors, particularly mining and agriculture, has not been offset by a sufficiently large increase in the share of relatively labour-intensive employment in non-traditional tradable goods and services, particularly manufacturing. Consequently, the objectives of the IPAP2 are:

1. To facilitate a shift away from reliance on traditional commodities and non-tradable services and promote value-added goods and services that compete in export markets (against imports).
2. To intensify the industrialisation process and move towards a knowledge-rich economy.
3. To promote a more labour-absorbing industrialisation path, with particular emphasis on tradable labour-absorbing goods and services and economic linkages that enhance employment creation.
4. To promote a broader-based industrialisation path characterised by increased participation of historically disadvantaged people and marginalised regions in the mainstream of the industrial economy.
5. To contribute to the industrial development of the African continent, with emphasis on building productive capabilities.

Implications of IPAP2

IPAP2 prioritise certain industrial sectors that have played an important role in economic development in various parts of South Africa. These sectors include:

1. Capital/Transport equipment and metals fabrication
2. Chemicals, plastic fabrication, and pharmaceuticals

In addition, IPAP2 envisages to fast track implementation through:

1. Maintaining momentum in the implementation of the ASGISA's prioritised sectors of Business Process Outsourcing and off shoring (BPO&O), as well as tourism and bio-fuels.
2. Implementing other substantive sector projects in diamond beneficiation and jewellery, agro-processing, film and crafts.
3. Developing strategies for sectors of mining and mineral beneficiation, agriculture, ICT (services and products), as well as creative industries.

4.3.3. The Comprehensive Rural Development Programme

The Comprehensive Rural Development Programme is a national collective strategy to fight poverty, hunger, unemployment and lack of development in rural areas. It was launched in August 2009 by President Jacob Zuma at Muyexe Village, Limpopo.

Government has pledged over R2.6 billion in conditional grants to provinces over the medium term. This will be used for agricultural infrastructure, training, advisory services and marketing, and for upgrading agricultural colleges. One of the priorities is to ensure that land reform, through redistribution and restitution, is more coherently linked to the creation of livelihoods for the poor.

A critical part of the Rural Development Programme is to stimulate agricultural production to contribute to food security. Government will support the provision of agricultural implements and input to support emerging farmers and households nationally, also making agricultural loans accessible and ensuring agricultural extension services of high quality. As part of the Rural Development Programme, government will also support initiatives that promote other forms of economic potential, including tourism, light manufacturing and cultural work.

The programme is expected to ensure the delivery of clean water, decent shelter, proper sanitation and enterprise-development support.

Implications of the Comprehensive Rural Development Programme

This Comprehensive Rural Development Programme is a very important document concerning the implementation of a Local Economic Development Strategy. The decentralised nature of the strategy implies that the Municipality is responsible for catalysing the transformation of local areas into economically viable communities. To facilitate positive change requires an in depth understanding of local rural areas, along with an excellent relationship with local business and communities.

4.3.4. The National Framework for Local Economic Development by CoGTA

The Framework intends to build a shared understanding of LED in South Africa and put into context the role of local economies in the national economy. It seeks to mobilise local people and local resources in an effort to fight poverty.

The focus of the Framework is upon:

1. Improving the competitiveness of the 52 District and Metropolitan municipal regions in South Africa by providing an approach to developing local economies with the participation of all relevant stakeholders.
2. Rendering economic growth compatible with social equity and safeguarding the environment.
3. What the state can do to support and reward citizens who organise locally and operate in local level partnerships to engage in greater economic activity, spreading economic activity in an even manner.
4. How the state can be a platform to facilitate the inclusion of all to participate in the economy.

Implications of the Framework for Local Economic Development

The Framework for Local Economic Development sets out the following three key roles, which local government can play in the Local Economic Development process:

1. To provide leadership and direction in policy-making.
2. To administer policy, programmes and projects.
3. To be the main initiator of economic development programmes through public spending, regulatory powers and the promotion of industrial- and small business development, social enterprises and co-operatives.

4.3.5. Northern Cape Provincial Growth and Development Strategy

Planning for the promotion of economic growth and social development lies at the core of government's responsibility to provide a better life for all. It is essential to ensure that planning is integrated across disciplines, co-ordinated within and between different planning jurisdictions, and aligned with the budgeting processes of national, provincial, and local governments.

The NCPGDS sets the tone for development planning and outlines the strategic planning direction in the Province. The main objectives set by the NCPGDS for development planning in the Province are:

1. Promoting the growth, diversification and transformation of the provincial economy
2. Poverty reduction through social development
3. Developing requisite levels of human and social capital
4. Improving the efficiency and effectiveness of governance and other development institutions
5. Enhancing infrastructure for economic growth and social development

The development targets for the Northern Cape Province identified by the Provincial Growth and Development Strategy (PGDS) are:

1. To maintain an average annual economic growth rate of between 4% and 6%
2. To halve the unemployment rate by 2014
3. To reduce the number of households living in poverty by 5% per annum
4. To improve the literacy rate by 50% by 2014
5. To reduce infant mortality by two thirds by 2014
6. To reduce maternal mortality by two thirds by 2014
7. To provide shelter for all by 2014
8. To provide clean water to all by 2009
9. To provide access to adequate sanitation to all by 2009
10. To reduce crime by 10% by 2014
11. To stabilize the prevalence rate of HIV and AIDS and begin the reverse by 2014
12. To redistribute 30% of productive agricultural land to PDIs by 2015
13. To conserve and protect 6,5% of our valuable biodiversity by 2014, and
14. To provide adequate infrastructure for economic growth and development by 2014

4.3.6. Northern Cape Provincial Local Economic Development Strategy

The Northern Cape government has embarked on a process of compiling a Provincial Local Economic Development Strategy (LED) at the beginning of 2009 to address the challenges presented by poverty and unemployment in the Province. The provincial government of the Northern Cape has specific coordination and facilitation responsibilities, which need to be addressed in an innovative manner to initiate and promote integrated and sustainable LED, as well as to attract investment. The following broad opportunity themes were identified for the Northern Cape:

1. Agricultural Production
    a. Game farming
    b. Livestock farming
    c. Crop farming
    d. Exotic and citrus fruit
    e. Mari-culture production

2. Mining Production
    a. Exploration of new/additional mineral locations
    b. Geotechnical assessment of economic feasibility

3. Manufacturing
    a. Agro-processing
    b. Mining beneficiation

4. SMME and Trade Support
    a. Training, Mentorship and Skills Development
    b. Information and Support Services

5. Investment in Infrastructure and Technology
    a. Agro-processing infrastructure
    b. Infrastructure necessary for investment in mining
    c. Infrastructure necessary for investment in tourism
    d. Infrastructure provision and delineation of industrial parks, hubs, IDZs
    e. Infrastructure investment needed for high-technology projects such SALT and the SKA
    f. Infrastructure investment in areas of retail business growth
    g. Investment in specialised technologies

6. Tourism
    a. Game hunting
    b. Eco-tourism
    c. Mining/Geological tourism (including exhibitions and festivals)
    d. Adventure tourism
    e. Agro-tourism (such as wine production and tasting)
    f. Tourism routes
    g. Cultural and heritage tourism
    h. Science tourism (such as group tours to SALT

Implications of the Northern Cape PGDS and LED Strategy

The Northern Cape PGDS and LED Strategy notes the fact that each District in the Province has its own regional potential development potential and the Municipality should relate planning frameworks in line with the objectives of the strategies. The main implications are:

1. Undertaking rigorous analysis of the space economy to identify areas of economic significance with a view on focusing government investment and development interventions to ensure maximum and sustainable impact.
2. Capitalising on complementarities and facilitating consistent and focused decision making by providing a common platform for structured dialogue.
3. Moving beyond mere focusing on integration and coordination procedures to establishing processes and mechanisms to bring about strategic coordination, interaction and alignment within government.

In terms of development policy in the Northern Cape, the following priority growth sectors have been identified:

1. Agriculture & Agro-processing
2. Tourism
3. Fishing and Mariculture
4. Energy
5. Mining and Mineral Beneficiation
6. Services
7. BPO & ICT
8. Manufacturing
9. Science
10. Transport

4.3.7. Implications for Siyathemba

Considering the policy alignment of the Siyathemba LED Strategy with relevant policies and strategies that linked directly with Local Economic Development in the region, the economic development Pillars has to be aligned with the relevant policies:

1. Agriculture and Rural Development
2. Enterprise Development
3. Tourism Development
4. Infrastructure and Industrial Development

Diagram 4.2 indicates the alignment of the various economic development Programmes to the various policy and strategies.

Diagram 4.2- Policy Alignment

Programme	Policy Alignment
1. Agriculture and Rural Development	• New Growth Path • The Comprehensive Rural Development Programme • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy
2. Enterprise Development	• New Growth Path • The National Framework for Local Economic Development by CoGTA • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy
3. Tourism Development	• New Growth Path • The Comprehensive Rural Development Programme • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy

Programme	Policy Alignment
4. Infrastructure and Industrial Development	• New Growth Path • The Industrial Policy Action Plan (IPAP2) • The National Framework for Local Economic Development by CoGTA • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy

SECTION 5: Strategy

This Section presents the Strategy constituting the Strategic Pillars, Programmes and Projects. These Strategic Pillars are based on the situation experienced within the local economy of Siyathemba and aim to utilise existing strengths and opportunities by transforming these into workable programmes and actions that will assist in reducing threats and alleviate the weaknesses in the local economic environment. The Strategic Pillars are supported via the development of programmes that aim to enable the specific sectors. Distinct actions are formulated in order to reach the targets of each programme.

5.1. Economic Development

Programmes have been developed to support the various Pillars. Distinct projects are formulated with explicit actions in order to reach the targets of each programme. Table 5.1 indicates the various Pillars, Programmes and Projects Identified for the Siyathemba LED Strategy.

Table 5.1 – Project Pillars and Programmes

Pillar	Programme	Project
Agriculture and Rural Development	1. Agro-Processing	• Maize & Wheat Mill • Dairy Processing & Packaging • Wool Production • Production of essential oils • Extensive Irrigation Crop Farming along the Orange River
	2. Emerging Farmer Support	• Mentorship Programme in association with commercial farmers • Demonstration of new farming methods and technologies • Establishment of an agricultural college in near Prieska • Availing farm land for emerging farmers • Goat meat processing and packaging

Pillar	Programme	Project
Enterprise Development	1. Investment Promotion and Development	• Development of serviced business plots for retail and industrial development (especially in Prieska) • New small grocery shop and restaurant development • Construction equipment sales and rental
	2. SMME and Entrepreneurial Support	• SMME Training Centre • Availing suitable business plots for informal traders • Development and implementation of appropriate town planning regulations for small businesses in the area
Tourism Development	1. Improving the Tourism Profile	• Resort and adventure tourism along the Orange River • New Casino Development (Prieska) • Game Reserve Development • The development of an annual festival at “Die Koppie” or "Die Bos"
Infrastructure and Industrial Development and facilitation	1. Industrial Diversification and Infrastructure Development	• Local Recycling Plant (paper, plastic and glass). • Brick Manufacturing Plant • Semi-precious stones beneficiation hub • Building sand quarry • A local Gemstone Beneficiation Plant • The processing of salt

5.2. Institutional Development

Siyathemba's commitment to Local Economic development must be facilitated through a dedicated administration and bureaucracy. This means that the Municipality's institutional structure must be configured in such a way that it supports LED and that the whole institution is geared towards integrated planning and implementation.

5.2.1. The Siyathemba Institutional Structure

Towards the end of making informed recommendations for implementing the LED Strategy from an institutional perspective, it is important to outline the main objectives of the Strategy to inform the Municipality's organisational structure. These objectives are:

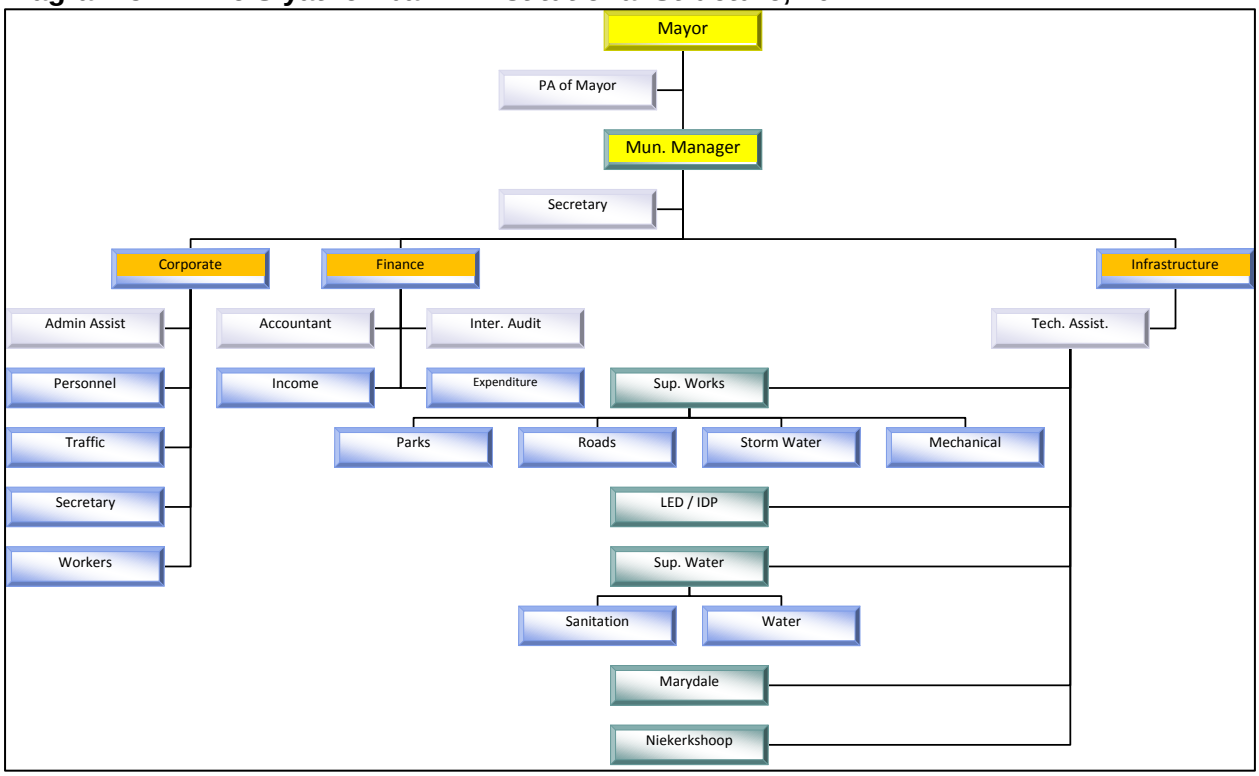
1. To facilitate and promote employment creation and poverty alleviation among local communities.
2. To promote internal and external investment into the local economy that would promote the growth of existing businesses, as well as the establishment of new businesses.
3. To ensure that local entrepreneurs and SMMEs are provided with the necessary support to establish and grow their businesses.
4. To implement strategies, programmes and projects that would create an environment conducive to investment and business growth.
5. To engage and interact with potential private sector investors.
6. To actively promote and market the local area to internal and external investors, in terms of local investment opportunities, planned infrastructure developments by the Municipality and development by other private investors.
7. To investigate approaches for lowering the cost of doing business in the area, as well as possible investment incentives aimed at strategic locations and economic sectors (such as Agriculture & Tourism).
8. To plan for, evaluate, manage and implement LED programmes as a coordinated effort between the Directorates of the Municipality and other role players.
9. To spearhead and drive community interaction, participation and buy-in of LED initiatives in local communities.
10. To act as the guardian of local people by ensuring that LED initiatives benefit them and that LED implementation occurs in such a way that labour intensive methods are applied.
11. To facilitate local access to and taking full advantage of LED and other development support programmes and funding sources provided by government, the private sector and other institutions (such as DTI & IDC programmes and venture capital).

More specifically, the Municipal IDP (2011/12) set the following criteria that should be considered in order for the municipality to have a credible LED Strategy:

- Effective and efficient service delivery.
- Optimal human and natural resource development and utilization.
- Local economic development and job creation.
- A vibrant tourism industry.
- A healthy HIV/Aids-free and secure community.
- A community friendly environment.

The institutional structure of the Siyathemba Local Municipality is illustrated by Diagram 5.1.

Diagram 5.1 - The Siyathemba LM Institutional Structure, 2012



Source: Siyathemba Municipal Integrated Development Plan, 2011-12

From this Diagram, the following observations can be made:

1. There are three Directorates on equal footing under the management of the office of the Municipal Manager in the structure.
2. The LED Function has not been designated as one of these Directorates but placed under the Infrastructure Directorate.
3. There does not seem to be any direct reporting linkages between LED and the office of the Municipal Manager.
4. Most of the Municipal structure is dedicated to issues relating to administration followed by traditional town planning services (such as water, electricity, refuse removal etc.)

5.2.2. Institutional Recommendations for LED

Due to the high levels of poverty, the concentrated nature of the local economy and the growing unemployment rate, it is strongly recommended that a LED Directorate be established that reports directly to the office of the Municipal Manager.

Diagram 5.2 – Recommended Institutional Structure for the LED Directorate

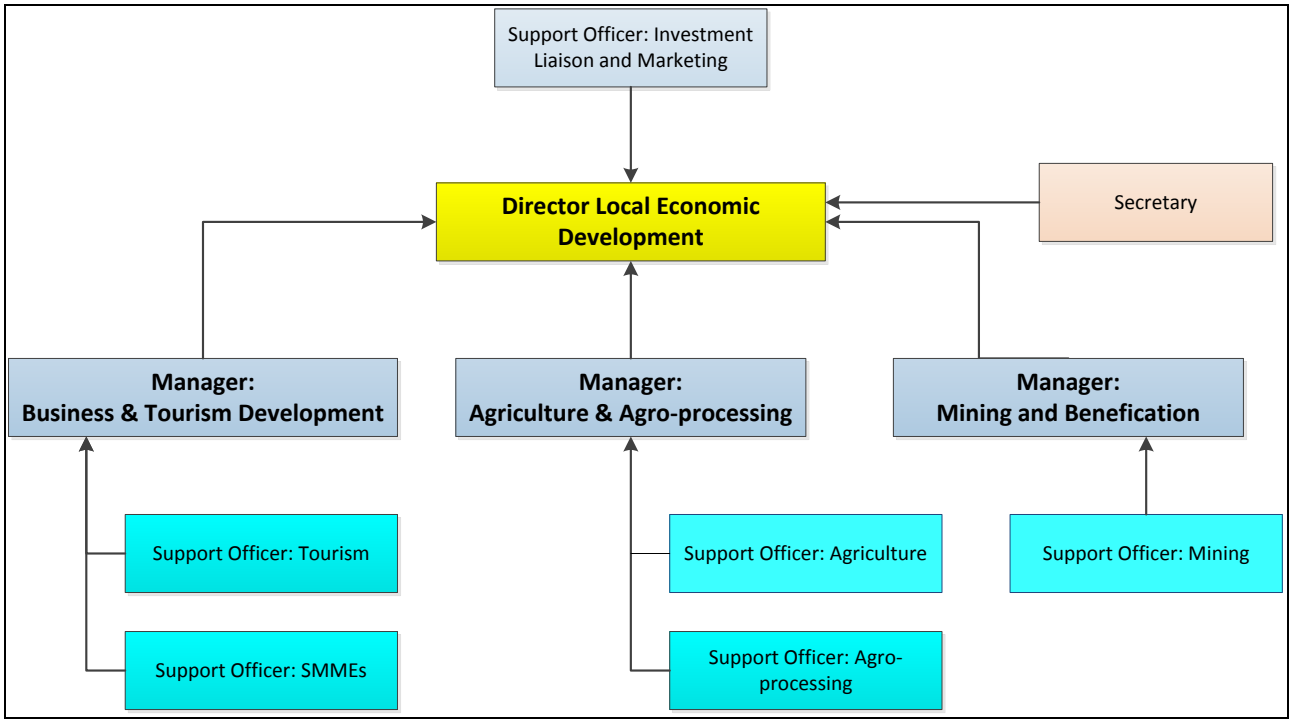


Diagram 5.2 illustrates the recommended institutional structure for the LED Directorate, in line with the LED Strategy Objectives as well as the IDP's LED Targets and Programmes (2011/12). This structure is deemed to be appropriate to drive and manage the LED functions of the Municipality due to the following reasons:

- The Structure aligns with the LED development objectives, targets and programmes and is therefore geared towards implementation.
- The Structure has been streamlined to promote cooperative planning and integration within the broader Municipal structure.
- The Structure makes provision for hands-on management backed up by the necessary support.
- The Structure allows for clear and predictable performance monitoring of the LED Directorate, as well as the officials assigned to it.
- The Structure allows for Investment Marketing which is seen as a vital part of the LED Strategy.
- The Structure is organised in such a way that it allows for the monitoring of business growth and employment trends associated with the objectives of the LED Strategy.

SECTION 6: Implementation Plan

This Section presents the Implementation and Action Plan for the Siyathemba LED. The actual implementation of the specified Pillars and development programmes is vitally important and should be regarded as of the utmost importance. While individual wealth and employment creation projects have been formulated for Siyathemba, the deployment of the LED strategy (i.e. the various Pillars and their respective development programmes), is central to the successful placement of the Municipality on a higher economic growth path.

This Section builds on the Potential Analysis and the LED Development Framework, and serves as a basis for implementation.

6.1. Strategy Implementation

To facilitate successful strategy implementation, it is necessary to outline an implementation framework tailored to the Siyathemba LED Development Framework. This implementation framework is based on the development Pillars and programmes identified in Section 3 & 4. The implementation framework reflect the key strategic focal points of implementation specifically with regards to small and agro business development, increasing the marketing and tourism sector, agricultural development and emerging farmer support, rural and community development and BEE empowerment. The framework is presented under the following headings:

1. Investment in business development and diversification.
2. Further unlocking the potential of the Primary sector and beneficiation.
3. Improve the capacity and resources of the Municipality.
4. Managing innovation.
5. Incubators and Cooperatives as a platform for LED implementation.
6. The road to unlocking private sector investment.

6.1.1. Investment in business development and diversification

The Development Framework underlines the importance of attracting new businesses/industries and expanding existing ones in Siyathemba.

Business diversification is important to sustainable economic development in Siyathemba because of high levels of unemployment and poverty. There are numerous examples globally where economies that focused solely on one specific industry sector paid a severe price upon the eventual decline of the industry (also known as the “all the eggs in one basket” scenario). The local Agriculture sector certainly fits that scenario. Siyathemba must prove extremely visionary in promoting economic diversification. In addition, Siyathemba must make sure that it has created an environment that will be supportive of domestic and international business investment. An added value of economic diversification is that it can possibly lead to the creation of and support for the development of BEE orientated SMMEs. Any effort to support SMMEs would be consisted with national, provincial, and municipal economic goals and objectives.

6.1.2. Further unlocking the potential of the Primary sector and beneficiation

Agriculture has long been an economic driver in Siyathemba. The concept of further unlocking the potential of agriculture is based on the beneficiation or value addition to raw produce from the area, rather than exporting these raw products at a low cost and deriving no benefit from value adding processes. In many respects the process of value addition of such products is more aligned to manufacturing in nature than to agriculture. There is no reason why the processing, packaging and distribution should not take place in Siyathemba. In this way the same raw material would generate more employment opportunities and wealth in the local communities where it is needed most.

In a similar way agricultural products can be processed further, value added, and exported from Siyathemba to the rest of the world. The beneficiation of suitable products would create many additional employment opportunities in the area and would significantly increase local economic growth. A process needs to be established to identify suitable opportunities that can be fully exploited to the benefit of the local population. An agro-business incubator or joint venture with local commercial farmers could create a suitable environment for this to happen. Sophisticated skills will be required to ensure that the proposed business ideas succeed.

6.1.3. Improve the capacity and resources of the Municipality

The development of Siyathemba will be significantly influenced by the ability and the capacity of the Local Municipality to manage and finance the LED Strategy. Many of the officials do not have extensive experience in Local Economic Development. They are also not familiar with dealing with the private sector in respect of large capital investments.

It is essential that the capacity of the responsible officials be improved where and when necessary. What is proposed here is thus the design and implementation of long-term capacity building initiatives coupled with formal training and development by recognised institutions.

6.1.4. Managing innovation

The process of managing innovation is in essence how one increases the translation of LED Opportunities to reality. The frequency and velocity of the process in Siyathemba will translate directly to economic growth and the creation of sustainable job opportunities. The development of a process that promotes a broad array of project ideas is an important element of a competitive strategy. Included in this process should be a means to assess the project ideas and match those that are deemed worthy with prospective funders. Siyathemba must be in a position to promote a free flow of new ideas and talents to address high priority issues related to sustainable economic development in the area.

Ideally, the Siyathemba LED forum should consist of a small group of core stakeholders and role players representing diverse interest in the area. This group must be charged with the task of addressing community priorities by receiving and reviewing ideas from any community member or would-be entrepreneur. The ideas received by the LED Steering Committee must then be reviewed in terms of criteria and development potential. Those ideas or projects that are deemed feasible can then be nominated for development facilitation and funding.

Projects or ideas approved by the LED Steering Committee should be subjected to feasibility studies for detailed scrutiny and evaluation. Once this process has been completed the project is presented for development facilitation (if necessary), funding and implementation.

The type of development facilitation and the implementation of the project will have to be determined on an individual basis. The main advantage of this process is that it encourages those most directly involved in sustainable economic development issues to set aside traditional rules and regulations and think "outside of the box". Its application by Siyathemba may prove extremely relevant in efforts to develop innovative economic development initiatives, which are community based and rooted.

6.1.5. Incubators and Cooperatives as a platform for LED implementation

A cooperative is a voluntary organisation formed by a group of people who have a common need that they want to address jointly, or a group of people who want to create employment for them[4].

A Cooperative means an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically – controlled enterprise organised and operated on co-operative principles[5].

Cooperative Principles:

1. Voluntary membership.
2. Democratic member control.
3. Member economic participation.
4. Autonomy and Independence.
5. Education, Training and Information.
6. Co-operation with other co-operatives.
7. Concern for members of the community.

These Principles inform the design of cooperative business models.

The formation of cooperatives as a method of development facilitation and project implementation is well known in South Africa. The concept is based on the idea of sharing resources and knowledge. A group of emerging farmers might for example decide to pool their resources to the benefit of the entire group. This group would then typically organise themselves into a cooperative. As a cooperative they are then able to purchase the necessary inputs such as farm implements that where too expensive for the farmers to buy individually. The cooperative will then also assume responsibility for marketing and managing the produce. As an application of development facilitation, emerging farmers can go into a cooperative agreement with an established commercial farmer. This works especially well if a Municipality or other institution (e.g. the Land Bank) assists the group of emerging farmers to acquire land and start-up capital. Under the mentorship of the commercial farmer, these emerging farmers can then become financially viable farmers in their own right under the cooperative agreement.

The primary objective of development incubators is to fast-track LED in a practical and proven manner. The primary goal of incubators is to facilitate economic growth in certain industries, job creation and investment attraction. An appropriate definition of an incubator is an organization that has the technical and financial capability to establish and grow businesses in a competitive environment. The entity must be able to establish and float independent and sustainable businesses effectively. Further, the incubator is expected to become a self-sustaining profit and investment centre over time. If correctly applied, incubators can breathe new life and vitality into the economy of Siyathemba.

[4] dti Co-operatives Handbook
[5] Co-operatives Act

Incubators are a mechanism for identification and development of entrepreneurs. They also provide a platform for focused government intervention through subsidy arrangements. They can improve the level of accountability and effectiveness of Government support. They can reduce the leakage that may occur in a government support programme because of the nature of the monitoring system and accountability inherent in a well-run incubator.

In Siyathemba the focus of incubators will be on the implementation of specific key programmes or projects. An incubator will typically be used to achieve the goals and objectives of a specific project. The purpose of an incubator will not be to assist as many entrepreneurs as possible or process as many trainees as possible. The very essence of an incubator is to select those entrepreneurs, which will contribute to the successful implementation of the LED Strategy.

Incubators provide assistance with mentoring, business development, marketing and securing access to finance. In addition, one of the most important functions is information dissemination and establishing linkages between the entrepreneurs and the private sector and government. Incubators must be viable, need to operate as a business, have their own source of sustainability, generate wealth, and fulfil the needs of the community to the greatest extent possible.

There are a number of criteria, policy and other issues, which need to be addressed in incubator development. These criteria include:

- Selectivity
- Accountability
- Accessibility to capital
- Qualified mentoring,
- Creation of synergy
- Industry knowledge
- Business and management

Incubators are in essence, designed to serve as a mechanism for generating new businesses, which in time will help alleviate poverty.

6.1.6. The road to unlocking private sector investment

It is important that the Siyathemba LM develops the skills and orientation that will enable it to facilitate and attract private sector investment. The starting point is to take responsibility, then to put the systems in place to execute that responsibility. The process of developing the capacity to respond effectively to this challenge is outside the scope of this LED Strategy document. However, below is a set of some of the critical matters that should be attended to in the operations of the Pixley ka Seme LM going forward.

Many governments, in their efforts to fast forward the developmental process, sometimes sidestep elements that are crucial to project sustainability. Pressures to deliver much needed basic services in response to community expectations and national government mandates such as Integrated Development Planning (IDP) and Local Economic Development (LED) also provide incentives for Municipalities and Provincial Governments to quicken the pace of delivery.

International development experience in countries throughout the world has indicated that millions, if not billions, have been wasted because of the unwillingness of governments to take the necessary precautions in project design, development, and subsequent implementation. While much has been said about the need of governments to focus on socio-economic development, much more needs to be said about the definition of a systematic process leading to it. The process involves the infusion of business policies, principles, and practices into socio-economic development planning.

Specifically, there are a number of steps that should be implemented by government to support sustainable development and economic investment. Simply put, a developmental project should involve much more than the construction of houses, provision of water and electricity, or the installation of bulk infrastructure.

Rather a developmental project should be premised on the following:

1. Pre-feasibility Study
2. Feasibility Study
3. Business Development Plan
4. Capital Raising

Why a pre-feasibility study? The pre-feasibility study is the most common and the most resource intensive of preliminary project preparation options. A pre-feasibility study is a precursor to a feasibility design study. Its main purpose is to ensure there is a solid basis for undertaking a feasibility design study. A pre-feasibility study is the investigation that normally precedes a decision to go forward with a given project proposal. The principal objectives of a pre-feasibility study are the following:

- Undertake a detailed analysis of the development situation and constraints the project is to address, and to identify government partner policies, programs and projects designed to address these constraints (including activities of other donors).
- Refine the logical framework matrix (based on collection of sound, objective data) and project proposal in a clear and realistic manner and make a preliminary assessment of the viability of alternative approaches.
- Identify and define the linkages between the project and poverty reduction, taking into account the findings of a poverty analysis.
- Define achievable outcomes for the project or define possible design options or concepts that may merit further investigation.
- Make a preliminary identification of the likely risks to achieving the objectives and to achieving sustainability after project completion, and assess the importance of these risks (i.e. preliminary risk analysis and sustainability analysis).
- Develop a terms of reference for a feasibility design study if this is deemed appropriate.
- Define further data collection and analysis requirements, and possible data sources, for the feasibility/design stage.

The pre-feasibility option is used if any one of the following is true:

1. There is a serious lack of information on the development problems to be addressed by the project and this needs fuller definition through an analysis by technical specialists before a feasibility study can be undertaken.

2. There is insufficient information to prepare the terms of reference for a feasibility design study.

Why Feasibility Study? A feasibility study is a combination of a market study and an economic analysis that provides an investor with knowledge of both the environment where a project will exists and the expected rate of return on investment to be derived from it. In sum, it is an investigation, which tries to clearly establish whether a project will work and achieve its expected results. A feasibility study is defined as an evaluation or analysis of the potential impact of a proposed project or program. It is conducted to assist decision makers in determining whether or not to implement a particular project or program.

Such a study usually evaluates in detail a project's technical design, its costs and benefits, economic feasibility, social and environmental aspects, institutional issues, financial aspects, public opinion, and analysis of alternative selection. The extensive research, conducted in a non-biased manner, will provide data upon which to base a decision. Feasibility studies are usually carried out in the preparation stage of the project cycle.

The components of a feasibility study include the following:

- Executive Summary: The executive summary provides an overview of the feasibility study and should include major findings of the study followed by a recommendation.

- Background Information: Some background information is critical to provide context for the feasibility study. The information should include: a summary of the community to be impacted (for example: number of community residents, geographical size of the community), summary of the related types of services currently being provided to the community, mission of local government in relation to the proposed project, goals and objectives of the government in relation to the proposed project, socio-economic trends that might impact the community (for example, recent and projected growth, skills, financial status); and the reason and rationale for the proposed project.

- Discussion of the proposed project: This portion of the feasibility study should outline the main characteristics of the proposed project. A description of the processes involved in the proposed project should also be included.

- Advantages and Disadvantages of the Proposed Project: The advantages and disadvantages of the proposed project need to be clearly explained in the feasibility study. Not only should potential gains be discussed, but also decision-makers need to know possible disadvantages of the proposed project. It is better to have the potential disadvantages described so that there will be no big surprises when the proposed project is implemented. Knowing the potential disadvantages also help the decision-makers to be realistic and determine ahead of time what they are willing to accept.

- Project Schedule: A "best guess" schedule for the project should be included as part of the feasibility study. Realistic dates for each phase of the project must be included; however, there are often delays during project implementation, particularly one with a major construction component.

- Final Recommendation: A final recommendation is provided in the feasibility study based on the research conducted. The recommendation includes the rationale and financial evidence that supports it.

In sum, a feasibility study provides local government officials with a very detailed assessment of what the best alternative in response to highest priority community needs. The feasibility study also serves a source of unbiased justification for moving forward with the implementation of a proposed project.

Why A Business Development Plan? A business plan is a comprehensive planning document, which clearly describes the business developmental objective of an existing or proposed business. The document describes the proposal's concept, the market problem, proposed solutions, business and revenue models, marketing strategy, technology, company profile, as well as financial data for coming years. It seeks to capture the vision, current status, expected needs, defined markets, and projected results. It also maps the marketing and organisational strategies that will enable the organisation to achieve its goals.

Many Local and Provincial Governments in South Africa have developed business plans, which reflect their overall developmental goals and objectives. It is equally important however for each proposed project to have a business plan. The business plan should contain information that exists in the feasibility study. It should however, provide a clear road map of the proposed project and all of its implications.

The business plan should include the following:

- Mission statement
- Identification of goals and objectives
- Statement of Purpose
- Description of the Proposed Project
- Background information about the location and beneficiaries
- Market Strategy
- Management and Human Resources
- Expected Effect of the Proposed Project
- Strategic Implementation Timeline
- Summary
- Monitoring and Evaluation Plan
- Financials

In sum, a business plan for a proposed project should greatly increase the ability of government officials to effectively manage, monitor, and evaluate its implementation. The business plan should serve as the principal source of guidance regarding the implementation of a project.

Why Capital Raising? Perhaps one of the most limiting factors affecting any developmental project is the raising of capital. From international donors to the Municipality, which have funds to support developmental project initiatives, the amount of funds available is usually problematic. Local governments in South Africa are also looking more and more to private institutions to help finance developmental projects.

In raising capital to support developmental projects, Siyathemba must make sure that the projects are viable, sustainable, and to the greatest extent possible and will ultimately pay for themselves. It is understood that the Siyathemba Municipality is facing budget challenges. For the Municipality to gain more access to private capital, officials must indicate their willingness and ability to apply strict fiscal management to their budgetary process. Fiscal accountability is critical to any government's efforts to raise capital.

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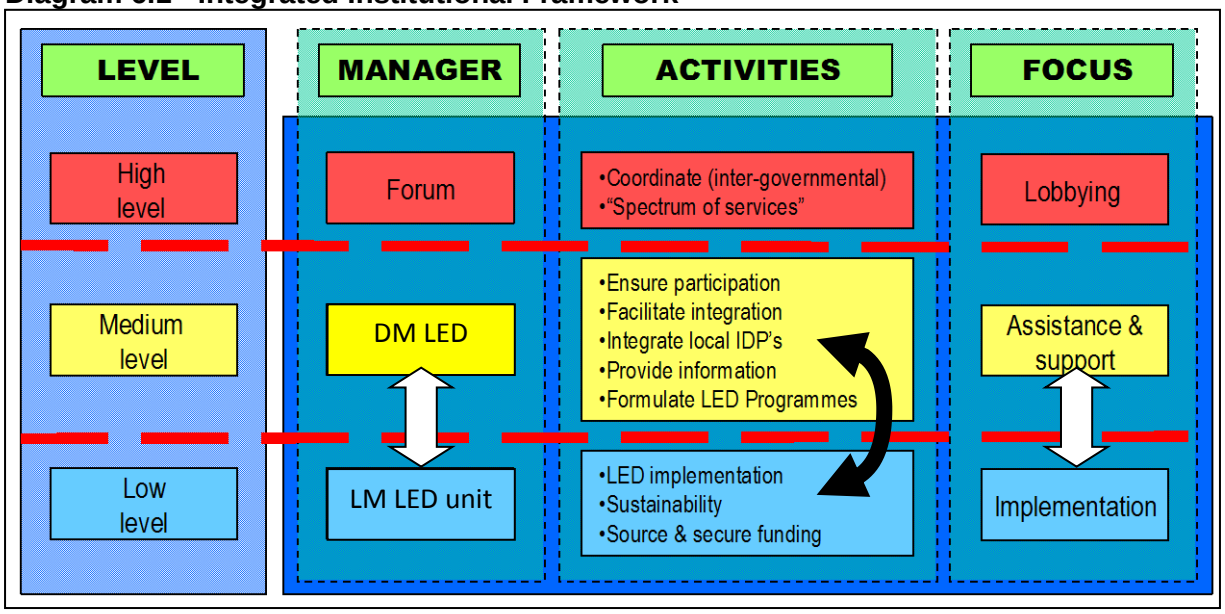
6.2. Integrated Institutional Approach

The integrated nature of the institutional recommendations must be highlighted. This integrative nature is highlighted by the characteristics of the proposed mechanisms to address among others:

1. How to structure the delivery mechanism in order for LED to be executed?
2. The critical issues which are addressed in terms of the above question.

Additionally, the roles and responsibilities of the different levels of government are presented and act as a point of departure. Similarly the actual implementation of the LED activities is viewed as the single most important element that will be able to guarantee LED success. It is for this reason that the proposed framework has been developed. The proposed framework is illustrated in Diagram 6.1.

Diagram 6.1 - Integrated Institutional Framework



It is evident that the formation of the additional body i.e. the LED Forum will not necessitate a complete abdication of LED duties by the Siyathemba Municipality. What is implied is that the "load" on the existing capacity of the LED Unit is extended through the deployment of additional resources.

The Siyathemba LED Unit must still play a central role in terms of the initiation of delivery of development support and assistance programmes. When LED projects are to be initiated and implemented on a practical level, five core activities have to be identified. It should be noted that these core activities are inter-connected and are not separated from each other.

Diagram 6.2 illustrates the inter-connected core-activities of the LED project management process:

Diagram 6.2 – The Core Activities of LED Project Management

- **Activity One:**

Identification refers to those activities pertaining to the identification of potential projects and opportunities that can be developed in the local economy. This is the first practical step to LED. The generation of new ideas and opportunities can be brought about through the establishment of committees, consultation of local communities and brainstorming sessions. Assessment of the initiatives in terms of a SWOT analysis should also be included. It is recommended that the initial step of idea generation and ongoing project/opportunity identification be undertaken by the local Municipality.

- **Activity Two:**

Defining the approach refers to the process of specifically defining the project and implies the actual formulation of business plans. Apart from the actual project design and refinement, the role that the Municipality can play to assist local entrepreneurs also falls into this category and includes activities such as the provision of the necessary infrastructure, ensuring and enabling institutional environment, etc.

- **Activity Three:**

The *Marketing* phase consists of two main components, namely place marketing as well as the marketing of the specific products/services produced by the respective projects. The provision of appropriate mechanisms by the Siyathemba LM to market the area is critically important to the successful attraction of investors to the area. Linked to this is the need for the provision of adequate exposure of local business to the services provided by the Local Municipality.

- **Activity Four:**

Development funding entails the acquiring of finances for implementation and development of projects. It also entail the facilitating efforts of the local authority through the provision of support in the application for funding as well as matching potential investors and funding sources.

- **Activity Five:**

The *implementation* phase entails the culmination of the preceding activities resulting in the identified opportunities being put into action. Assistance during the initial stages of implementation is critical and measures to assist entrepreneurs include the provision of support activities, the formation of partnerships as well as mentoring activities (skills development).

Each of the aforementioned activities/phases of practical implementation is made up of its own components. These components, similar to the activities, are interdependent and progressive and build up to the implementation and evaluation of projects. It is important to note that the Pixley ka Seme District Municipality should assist Siyathemba in all of the abovementioned activities of practical implementation depending on the capacity and/or assistance required.

Table 6.1 identifies the components for each of the activities for practical implementation of the LED strategy and allocates responsibilities to the Local Municipality (Siyathemba) and the District Municipality (Pixley ka Seme) according to capacity.

Table 6.1 - Specific core activities and components

RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
ACTIVITY ONE: IDENTIFICATION		
Local	➔ Idea generation	Establish organising committee. Consult local community- workshops. Consult professional expertise. Brainstorming sessions.
Local	➔ Opportunity identification	Community planning.
Local & District	➔ Business plan formulation	Consult experts. Write business plan.
ACTIVITY TWO: DEFINE APPROACH		
Local & District	➔ Market analysis	Periodic business survey. Benchmarking (success stories). Establish business chambers. Update business database.
Local	➔ Legislation	Review by-laws and amend where necessary.
Local & District	➔ Management	Delegate responsibility to a “driver”.
District	➔ Access to support structures	Make inventory of support services available. Clear understanding of approval and selection processes.

RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
Local	➔ Location	Identify appropriate areas and ensure focused development within selected areas (development nodes).
Local & District	➔ Land & Buildings	Set up an inventory of potential buildings that can be utilised during development by entrepreneurs. Determine where projects can be housed. Approach private sector to release property for utilisation. Negotiate favourable rent rates.
Local & District	➔ Infrastructure	Ensure necessary infrastructure is available to potential investors e. g tarred roads and storm water, sanitation and water.
		Guarantee adequate maintenance of infrastructure and services.
District & Local	➔ Labour force	Encourage and support local training facilities to expand curricula aimed at the broadening of the skills base.
		Encourage and coordinate (as far as possible) Provincial Government Departments to undertake training within Siyathemba.
ACTIVITY THREE: MARKETING		
Local & District	➔ Place marketing	Printed media. Alignment with other initiatives.
Local & District	➔ Lobbying	Lobby appropriate government departments.
Local & District	➔ Project launches	Use launches to create awareness of project. Communicate progress of the projects to the community.
ACTIVITY FOUR: DEVELOPMENT FUNDING		
District & Local	➔ Funding	Develop database of all donor and funding agencies. Facilitate the successful application for funding from the various institutions. Provide info to applicants regarding different potential types of funding and funding institutions.
District & Local	➔ Grant funding	Lobby respective donor agencies to provide grant funding.

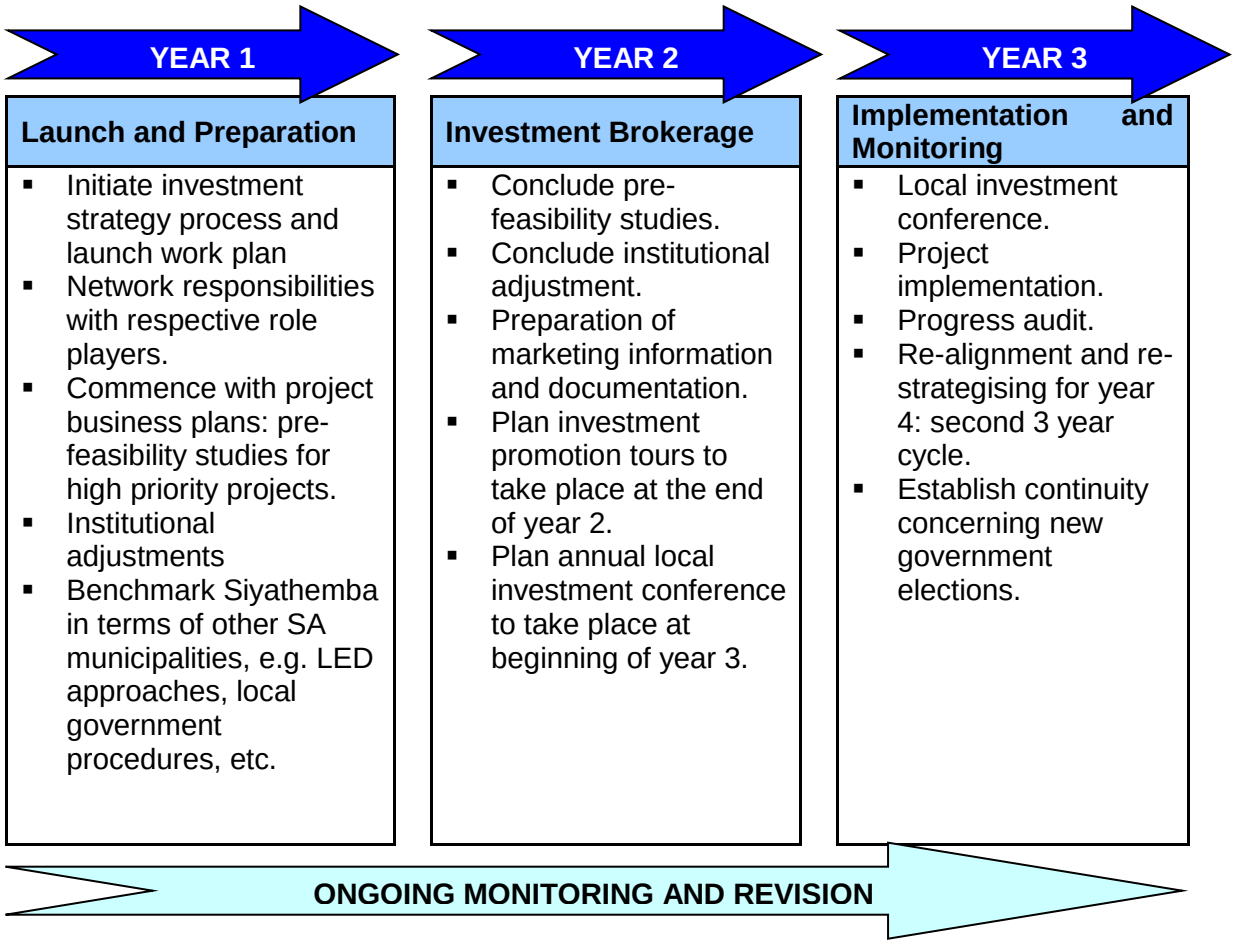
RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
District & Local	➔ Loans	Engage commercial institutions to provide loans to emerging entrepreneurs. Assist entrepreneurs during applications for loans.
Local & District	➔ Own capital	Encourage existing business to expand operations within the local area.
District	➔ Seed and venture capital	Support applications to organizations such as the IDC, which provides seed and venture capital to potential investors.
District	➔ Development Support	Enhance awareness and skills in areas such as: ▪ Business planning ▪ Customer service ▪ Performance management ▪ New market opportunities, etc.
District & Local	➔ Establishment support	Provide start-up service (e.g. incubator) to entrepreneurs such as: ▪ Determining customer base ▪ Competitive pricing ▪ Promotional programmes ▪ Competition ▪ Strategic/convenient location
District & Local	➔ Matchmaking	Link opportunities, funding and entrepreneurs.
		Referral of business opportunities as well as assistance in the application for funding.
ACTIVITY FIVE: IMPLEMENTATION		
District & Local	➔ Partnerships	Establish partnerships between the existing local business and emerging entrepreneurs.
		Joint Ventures (private & public)
Local	➔ Fast-track approval process	Stream line the approval process to provide investors with speedy replies with regards to developmental aspects/ enquiries/applications. Convene extra-ordinary council meetings where necessary.
Local	➔ Support structures	Provide counselling (advice, info and support) at one-stop centres for business development, tourism, etc. at Municipal offices.
Local & District	➔ Incubators	Establish local business support centres (LBSCs) and incubators.
District & Local	➔ Management Support services	Training of entrepreneurs in practical business skills as well as more general workshops on self-employment. Provide administrative support to emerging entrepreneurs. Provide mentorship programmes.

RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
District & Local	➔ Capacity development	Experience exchange – providing local entrepreneurs an opportunity to share experiences and ideas through seminars, workshops, etc. Coordinate and link activities undertaken by the local training facilities, and government departments. Develop and apprenticeship/traineeship scheme where a number of local businesses share a group of trainees.
Local & District	➔ Mentoring	One-to-one guidance. Continued advice and regular meetings with business operators. Guidance with marketing, accounting and management procedures. Assistance in identifying and solving problems. Introductions to business and professional organisations. Personal support.

6.3. Phased Implementation Plan

The proposed LED Implementation Plan is illustrated in Diagram 5.3. The Figure summarises important actions and financial considerations pertaining to the first of a number of consecutive three year implementation and revision cycles.

Diagram 6.3 - Phased Implementation and Financial Planning, First 3-year cycle



Budgetary allowances for business plans, investment tours and the investment conference should provide for R700 000 to R1 million per annum over the first three year cycle.

6.4. Monitoring and Evaluation System

Implementation of the LED Strategy needs to be monitored on an ongoing basis. Progress with respect to new investment and the impact thereof on Siyathemba's economy needs to be constantly assessed and monitored over the implementation period of the strategy. To enhance efficiency and effectiveness of the strategy, continuous adjustments need to be made, based on market fluctuations and demand changes. This entails continuous strategic re-positioning.

The rationale for developing and updating a Monitoring and Evaluation System include the following:

- Inform the sector departments of the development needs in Siyathemba
- Ensure that all role players are aware of all projects planned in the area
- Make information of all projects available at one glance
- Compare profiles, projects and funds allocated
- Compare Siyathemba with other Municipalities in South Africa
- Indicate whether national or provincial policies are adhered to by comparing the number and type of projects and the amount of funding
- Inform all role players on the progress of project implementation
- Inform provincial departments and politicians about the status of implementation by Siyathemba
- Determine the contribution and effectiveness of each Pillar, Programme and Project. In this regard Key Performance Indicators (KPIs) can be linked to specific strategies (PGDS, LED & IDP)
- Pinpoint the areas of intervention through progress and tracking reports
- Compare progress over numerous years

The KPIs associated with the various identified projects and programmes are illustrated in Table 6.2.

Table 6.2 – Siyathemba LED performance monitoring indicators

LED Pillar	Programmes	Projects	Five year KPIs
Pillar 1 **Agriculture and Rural Development**	Agro-processing Emerging Farmer Support	Maize & Wheat Mill Dairy Processing & Packaging Wool Production Production of essential oils Extensive Irrigation Crop Farming along the Orange River Mentorship Programme in association with commercial farmers Demonstration of new farming	Number of emerging farmers in operation Portion of crops which are beneficiated locally Usage of arable farm land for cultivation or grazing Export tonnage of farm produce (beneficiated or not) Number of commercial uses identified for existing crops Number of new agro-processing units

LED Pillar	Programmes	Projects	Five year KPIs
		methods and technologies Establishment of an agricultural college in Prieska Availing farm land for emerging farmers Goat meat processing and packaging	Number of emerging farmers supported Emerging farmer support programmes
Pillar 2 **Enterprise Development**	Investment Promotion and Development SMME and Entrepreneurial Support	Development of serviced business plots for retail and industrial development (especially in Prieska) New small grocery shop and restaurant development Construction equipment sales and rental SMME Training Centre Availing suitable infrastructure (stalls) for informal traders Development and implementation of appropriate town planning regulations for small businesses in the area	Number of SMMEs in the area (growth) Number of SMMEs supported through assistance programmes Number of LED initiatives implemented through the LED Forum Number of people employed by SMMEs Number of new SMMEs Survival rate of SMMEs Infrastructure support for informal traders (e.g. stalls and ablution facilities)
Pillar 3 **Tourism Development**	Improving the Tourism Profile	Resort and adventure tourism along the Orange River New Casino Development (Prieska)	Siyathemba share of the Pixley ka Seme tourism market. Development of new tourism packages & routes

LED Pillar	Programmes	Projects	Five year KPIs
		Game Reserve Development The development of an annual festival at “Die Koppie” or "Die Bos"	Tourism investment (in new and existing offerings/destinations)
Pillar 4 **Infrastructure and Industrial Development**	Industrial Diversification and Infrastructure Development	Local Recycling Plant (paper, plastic and glass) Brick Manufacturing Plant Semi-precious stones beneficiation hub Building sand quarry A local Gemstone Beneficiation Plant The processing of salt	Fixed investment, job creation and production Investment incentives (packages available) Value of real private sector investment p.a. Manufacturing GGP Value of annual exports Diversification in the Manufacturing sector Competitiveness of exports The cost of doing business in Siyathemba

6.5. The Way Forward

To ensure the optimal implementation of the Siyathemba Local Economic Development Strategy, the following recommendations are made here:

1. Make sure that all people employed to undertake implementation have the relevant experience, expertise, skills, etc. to ensure effective management and implementation.
2. Make use of experts for the drafting of the relevant project business plans and utilise the available funding sources.
3. Ensure that all information needed for implementing a project is included in the business plan, including the responsible parties, the amount of funding required, the timeframes for implementation, resources and equipment needed for implementation, etc.
4. Ensure balanced economic development by means of adopting an integrated, holistic, coordinated and diverse developmental focus.
5. Start by implementing the programmes and projects with the fastest anticipated impact on job creation, poverty alleviation, BBBEE, SMME development, increase in living conditions, human development, etc. followed by those with a medium and longer term effect.
6. Make sure all financial sources, equipment, human resources, etc. are in place and available before starting with the implementation of a programme and/or project.

7. Focus on stimulating economic development and empowerment of local people at the same time.
8. Make sure that the implementation of projects are executed by local people and not imported labour.
9. Set reasonable timeframes and keep a monthly/weekly track record to evaluate the progress of all necessary actions.

An important aspect for successful implementation is to ensure that all involved take ownership of the programmes and projects. Without ownership-taking of a programme and/or project, success will not be accomplished. It is also important to incorporate monitoring and evaluation elements for each of the Pillars into a performance management system, to ensure accountability and responsibility for implementation and to eradicate potential conflicts.

Siyathemba IDP Strategic Objectives

2011/12 Financial Year	2013/14 MTREF
1. The provision of quality basic services and infrastructure	1. Provision of quality basic services and infrastructure
2. Municipal Institutional Development and Transformation	2. Economic growth and development that leads to sustainable job creation
3. Municipal Financial Viability and Management	To effectively manage the revenue and expenditure functions of the municipality To implement an effective system of budgeting and in year reporting procedures
4. Good Governance and Public Participation	4. Promote sound governance Ensure financial sustainability Optimal institutional transformation to ensure capacity to achieve set objectives

In order to ensure integrated and focused service delivery between all spheres of government it was important for the Municipality to align its budget priorities with that of national and provincial government. All spheres of government place a high priority on infrastructure development, economic development and job creation, efficient service delivery, poverty alleviation and building sound institutional arrangements.

Local priorities were identified as part of the IDP review process which is directly aligned to that of the national and provincial priorities. The key performance areas can be summarised as follows against the five strategic objectives:

1. Provision of quality basic services and infrastructure which includes, amongst others:
    - Provide electricity;
    - Provide water;
    - Provide sanitation;
    - Provide waste removal;
    - Provide housing;
    - Provide roads and storm water;
    - Provide Municipality planning services; and
    - Maintaining the infrastructure of the Municipality.

2. Economic growth and development that leads to sustainable job creation by:
    - Ensuring the is a clear structural plan for the Municipality;
    - Ensuring planning processes function in accordance with set timeframes;
    - Facilitating the use of labour intensive approaches in the delivery of services and the building of infrastructure.

3.1 Fight poverty and build clean, healthy, safe and sustainable communities:
    - Effective implementation of the Indigent Policy;
    - Working with the provincial department of health to provide primary health care services;
    - Extending waste removal services and ensuring effective Municipality cleansing;
    - Ensuring all waste water treatment works are operating optimally;
    - Working with strategic partners such as SAPS to address crime;
    - Ensuring save working environments by effective enforcement of building and health regulations;
    - Promote viable, sustainable communities through proper zoning; and

- Promote environmental sustainability by protecting wetlands and key open spaces.

3.2 Integrated Social Services for empowered and sustainable communities
- Work with provincial departments to ensure the development of community infrastructure such as schools and clinics is properly co-ordinated with the informal settlements upgrade programme

4. Foster participatory democracy and Siyathemba principles through a caring, accessible and accountable service by:
- Optimising effective community participation in the ward committee system; and
- Implementing Siyathemba in the revenue management strategy.

5.1 Promote sound governance through:
- Publishing the outcomes of all tender processes on the municipal website

5.2 Ensure financial sustainability through:
- Reviewing the use of contracted services
- Continuing to implement the infrastructure renewal strategy and the repairs and maintenance plan

5.3 Optimal institutional transformation to ensure capacity to achieve set objectives
- Review of the organizational structure to optimize the use of personnel;

In line with the MSA, the IDP constitutes a single, inclusive strategic plan for the Municipality. The five-year programme responds to the development challenges and opportunities faced by the Municipality by identifying the key performance areas to achieve the five the strategic objectives mentioned above.

In addition to the five-year IDP, the Municipality undertakes an extensive planning and developmental strategy which primarily focuses on a longer-term horizon; 15 to 20 years. This process is aimed at influencing the development path by proposing a substantial programme of public-led investment to restructure current patterns of settlement, activity and access to resources in the Municipality so as to promote greater equity and enhanced opportunity. The strategy specifically targets future developmental opportunities in traditional dormitory settlements. It provides direction to the Municipality's IDP, associated sectoral plans and strategies, and the allocation of resources of the Municipality and other service delivery partners.

This development strategy introduces important policy shifts which have further been translated into seven strategic focus areas/objectives as outlined below:

- Developing dormant areas;
- Enforcing hard development lines – so as to direct private investment;
- Maintaining existing urban areas;
- Strengthening key economic clusters;
- Building social cohesion;
- Strong developmental initiatives in relation to the municipal institution as a whole; and
- Sound financial fundamentals.

Lessons learned with previous IDP revision and planning cycles as well as changing environments were taken into consideration in the compilation of the fourth revised IDP, including:

- Strengthening the analysis and strategic planning processes of the Municipality;
- Initiating zonal planning processes that involve the communities in the analysis and planning processes. More emphasis was placed on area based interventions, within the overall holistic framework;
- Ensuring better coordination through a programmatic approach and attempting to focus the budgeting process through planning interventions; and
- Strengthening performance management and monitoring systems in ensuring the objectives and deliverables are achieved.

The 2013/14 MTREF has therefore been directly informed by the IDP revision process and the following tables provide a reconciliation between the IDP strategic objectives and operating revenue, operating expenditure and capital expenditure.

Table 1 MBRR Table SA4 - Reconciliation between the IDP strategic objectives and budgeted revenue

NC077 Siyathemba - Supporting Table SA4 Reconciliation of IDP strategic objectives and budget (revenue)

Strategic Objective	Goal	Goal Code	Ref	2009/10	2010/11	2011/12	Current Year 2012/13			2013/14 Medium Term Revenue & Expenditure Framework		
R thousand				Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2013/14	Budget Year +1 2014/15	Budget Year +2 2015/16
Basic delivery	Waste Management			–	–	194	3 990	1 824	1 824			
Basic delivery	Planning and development			–	–	3 846	2 136	2 166	2 166			
Basic delivery	Housing											
Basic delivery	Sport and recreation											
Basic delivery	Waste Water Management			2 300								
Basic delivery	Road transport			1 373	4 329	3 095	–	9 018	9 018			
Basic delivery	Electicity			–	2 058	2 912				6 635	3 950	3 100
Basic delivery	Water			–	–	6 777	10 252			11 858	3 208	9 821
Basic delivery	Road transport			1 373	4 329					4 542	6 500	
Basic delivery	All services			38 636	53 950	36 643	52 878	89 439	89 439	96 984	88 067	90 888
Allocations to other priorities			2									
Total Revenue (excluding capital transfers and contributions)			1	**43 682**	**64 666**	**53 468**	**69 256**	**102 447**	**102 447**	**120 019**	**101 725**	**103 809**

KPA	Section nr	Source	Objective	Strategies	Projects	Area	Budget	Year 1		Finance Management Grant	Municipal Systems Improvent Grant	Equitable Share	EPWP	INEP Eskom	Regional Bulk Infratructure	MIG	ACIP	Sports, Arts and Culture (Library and Sports)
								Funded	Unfunded	R 1 500	R 800	R 20 108	R 1 000	R 1 200	R 500	R 12 429	R 2 870	R 689
1.1	1	IDP2012/13	Service delivery and infrastructure development	Water	Development of a Operation and Maintenance plan addressing crises and proactive maintenance	Jurisdiction area	R 0		✓									
1.1	2	IDP2012/13	Service delivery and infrastructure development	Water	Finalisation of the Water safety plan and implementation of rectification plans	Jurisdiction area	R 0		✓									
1.1	5	IDP2012/13	Service delivery and infrastructure development	Water	Bulk water supply provision from the Orange River to Marydale	Marydale	R 500 000	✓							✓			
1.1	6	IDP2012/13	Service delivery and infrastructure development	Water	926:Marydale Upgrading of water supply infrastructure and Water reticulation project	Marydale	R 5 099 000	✓								✓		
1.1	6	IDP2012/13	Service delivery and infrastructure development	Water	Feasibility study and Masterplan on internal water supply network in Marydale	Marydale	R 440 000	✓									✓	
1.1	7	new project list	Service delivery and infrastructure development	Water	Build pipeline from Orange River to Niekerkshoop for Bulk water supply	Niekerkshoop	R 350 000	✓							✓			
1.1	8	IDP2012/13	Service delivery and infrastructure development	Water	Refurbishment of Prieska water treatment works and internal water supply network	Prieska	R 220 000	✓									✓	
1.1	11	IDP2012/13	Service delivery and infrastructure development	Water	House connections to informal housing in Niekerkshoop	Niekerkshoop	R 0		✓									
1.2	2	IDP2012/13	Service delivery and infrastructure development	Sanitation	Finalisation of the Wastewater risk abatement plan and implementation of rectification plans (Green drop support)	Jurisdiction area	R 0		✓									
1.2	6	MIG	Service delivery and infrastructure development	Sanitation	MIG 1169:MARYDALE: Upgrading of Waste water treatment works in Marydale	Marydale	R 6 882 049	✓								✓		
1.2	12	IDP2012/13	Service delivery and infrastructure development	Sanitation	Development of Business plans to address all the sanitation needs in the area	Jurisdiction area	R 0		✓									
1.3	5	Waste Management	Service delivery and infrastructure development	Waste management	Authorise Niekerkshoop and Marydale disposal sites	Jurisdiction area	R 0		✓									
1.3	6	MIG	Service delivery and infrastructure development	Waste management	924:Marydale Upgrading of Solid waste	Marydale	R 1 824 000	✓								✓		
1.3	7	MIG	Service delivery and infrastructure development	Waste management	923:Prieska Upgrading of Solid Waste	Prieska	R 2 166 000	✓								✓		
1.4	1	IDP2012/13	Service delivery and infrastructure development	Energy	Electrical Supply for 206 Households in Prieska	Prieska	R 3 420 000	✓						✓				
1.4	4, 5, 6	MIG	Service delivery and infrastructure development	Energy	442: Prieska/Marydale/ Niekerkshoop High Mast lighting	Prieska, Marydale, Niekerkshoop	R 2 882 013	✓								✓		
1.5	11	new project list	Service delivery and infrastructure development	Roads	Upgrading and Tarring of Prieska Excess Roads	Prieska	In Process	✓							✓			
1.5	17	MIG	Service delivery and infrastructure development	Roads	276:Prieska Access Roads	Prieska	R 3 772 000	✓								✓		
1.11	8	MIG	Service delivery and infrastructure development	General	928:Marydale Expansion of existing cemetery	Marydale	R 2 835 364	✓								✓		
1.11	14	new project list	Service delivery and infrastructure development	General	Develop of New Cemetery in Prieska	Prieska	R 2 136 325	✓								✓		
2	2	TAS	Public participation and good governance	Public participation and good governance	Development of a Integrated communication strategy	Municipal	R 0		✓									
2	4	TAS	Public participation and good governance	Governance Structures	Train Ward committees that is not fully empowered and identify spokesperson to attend meetings	Jurisdiction area	R1000.00 PER WARD MEMBER * 9 WARDS	✓										
2	5	TAS	Public participation and good governance	Governance Structures	Appointment of CDWs vs. the number of wards	Jurisdiction area	R 0		✓									
2	6	TAS	Public participation and good governance	Governance Structures	Roll out of strategy and guidelines with regards to the establishment of the Oversight Comittee for Council	Municipal	R 0		✓									
2	7	TAS	Public participation and good governance	Governance Structures	Esthablish a proper Municipal complaints system	Municipal	R 0		✓									
2	8	TAS	Public participation and good governance	Governance Structures	Enhance Front desk interface to be more Client friendly	Municipal	R 0		✓									
2	10	TAS	Public participation and good governance	Governance Structures	Enhancements to the Siyathemba Newsletter and website	Jurisdiction area	R 0		✓									
2	11	IDP2012/13	Public participation and good governance	Governance Structures	Roll out of the Library action plan	Jurisdiction area	R 690 000	✓										✓
3	1		Institutional development and Transformation	Institutional development and Transformation	Recruitment, Selection and Suspension of employees	Jurisdiction area	R 0		✓									
3	2		Institutional development and Transformation	Institutional development and Transformation	Finalize process of appointment of debt collection service provider	Jurisdiction area	R 0		✓									
3	3		Institutional development and Transformation	Institutional development and Transformation	Improve Staff Minimum Competency Levels	Jurisdiction area	R 0		✓									
3	4	TAS	Institutional Development and Transformation	Institutional Development and Transformation	Adopt all necesary Strategies, Plans, Reports and Systems by Council	Jurisdiction area	R 0		✓									
3	5	TAS	Institutional Development and Transformation	Institutional Development and Transformation	Establish a Functional Labour Forum	Jurisdiction area	R 0		✓									
3	6	Performance management	Institutional Development and Transformation	Institutional Development and Transformation	Adherance to the Municipality's employment equity plan	Jurisdiction area	R 0		✓									
3	7	IDP2012/13	Institutional Development and Transformation	Institutional Development and Transformation	Development of a Integrated Human Resource strategy and staff retention and attraction strategy	Jurisdiction area	R 0		✓									
3	8	IDP2012/13	Institutional development and Transformation	Institutional development and Transformation	Roll out of the Performance management system	Jurisdiction area	R 0		✓									

KPA	Section nr	Source	Objective	Strategies	Projects	Area	Budget	Year 1		Finance Management Grant	Municipal Systems Improvent Grant	Equitable Share	EPWP	INEP Eskom	Regional Bulk Infratructure	MIG	ACIP	Sports, Arts and Culture (Library and Sports)
4	1	TAS	Financial Viability	Financial Viability	Execute Phase 2 of the Asset management programme	Municipal	R 0		✓									
4	2	TAS	Financial Viability	Financial Viability	The employment of 6 interns to assist within the Supply Chain Management Unit/operations of the financial division	Jurisdiction area	R 576 000	✓		✓								
4	3	Performance management	Financial Viability	Financial Viability	To increase the payment for services	Jurisdiction area	R 0		✓									
4	4	Performance management	Financial Viability	Financial Viability	Manage expenditure and income in accordance with the approved budget	Municipal	R 0		✓									
4	5	Performance management	Financial Viability	Financial Viability	To improve the financial viability of the municipality	Municipal	R 300 000	✓		✓								
4	6	IDP2012/13	Financial viability	Financial viability	Improve fully compliant GRAP AFS - Tender	Municipal	R 0		✓									
4	7	IDP2012/13	Financial viability	Financial viability	Operation Clean Audit	Municipal	R 400 000	✓		✓								
4	8	IDP2012/13	Financial viability	Financial viability	Improve Asset register / Compliance MPRA	Municipal	R 0		✓									
4	9	IDP2012/13	Financial viability	Financial viability	Replacement of Plessey electricity meters with Conlog meters	Municipal	R 200 000	✓			✓							
4	10	IDP2012/13	Financial viability	Financial viability	Initiative Valuation Roll	Municipal	R 400 000	✓		✓	✓							
4	11	IDP2012/13	Financial viability	Financial viability	Maintenance of operating systems e.g. TGIS and Sabata	Municipal	R 319 000	✓		✓								
4	12	IDP2012/13	Financial viability	Financial viability	Revision of tarrif structure	Municipal	R 0		✓									
4	13	IDP2012/13	Financial viability	Financial viability	Internal Audit fees	Municipal	R 105 000	✓		✓								
5	1	IDP2012/13	LED	Local economic development	Approval of the LED strategy	Municipal	R 0		✓									
5	2	IDP2012/13	LED	Local economic development	Development of an action plan (with priorities) to execute the recommendations made in the s	Municipal	R 0		✓									
5	3	IDP2012/13	LED	Local economic development	Develop Project execution plans for the 3 Anker development projects	Municipal	R 0		✓									
5	4	new project list	LED	Local economic development	Pursue the Developed of "Die Bos" as a Tourist destination	Jurisdiction area	R 0		✓									
5	5	new project list	LED	Local economic development	Avail 6 500ha of Land for Solar Development Park and Investment	Jurisdiction area	R 0		✓									
5	8	new project list	LED	Local economic development	Manufacturing Solar and other Renewable Energy Development Zone	Jurisdiction area	R 0		✓									
5	11	new project list	LED	Local economic development	Establish a Development Corporation (SPV) for Siyathemba	Jurisdiction area	R 0		✓									
5	12	new project list	LED	Local economic development	Create and access strategy for the LED opportunities in Siyathemba	Jurisdiction area	R 0		✓									
5	15	new project list	LED	Local economic development	Upgrading of LED / IEDP Strategies and adoption by Council / Aligned to the DGDS and PGDS	Jurisdiction area	R 0		✓									
5	39	new project list	Local economic development	Local economic development	Pursue Asbestos Rehabilitation	Jurisdiction area	R 0		✓									
5	40	new project list	Local economic development	Local economic development	Upgrading and Greening of Public Spaces	Jurisdiction area	R 0		✓									
5	41	new project list	Local economic development	Local economic development	Cleaning of Streets; SMME's	Jurisdiction area	R 0		✓									
5	43	TAS	Local economic development	Local economic development	Expand LED / IDP Unit; Recruit or train stuff (local people) to this Regard	Jurisdiction area	R 0		✓									
5	45	Performance management	Local economic development	Local economic development	Pursue Anchor Development in order to create Job opportunities	Jurisdiction area	R 0		✓									

Comprehensive Project List

KPA	Section nr	Source	Objective	Strategies	Projects	Area	Budget	2012 / 2013		2013 / 2014		Wishlist		Finance Management Grant	Municipal Systems Improvent Grant	Equitable Share	EPWP	INEP Eskom	Regional Bulk Infratructure	MIG	ACIP	Sports, Arts and Culture (Library and Sports)
								Funded	Unfunded	Funded	Unfunded	Funded	Unfunded	R 1 500	R 800	R 20 108	R 1 000	R 1 200	R 500	R 12 429	R 2 870	R 689
1.1	1	IDP2012/13	Service delivery and infrastructure development	Water	Development of a Operation and Maintenance plan addressing crises and proactive maintenance	Jurisdiction area	R 0	✓														
1.1	2	IDP2012/13	Service delivery and infrastructure development	Water	Finalisation of the Water safety plan and implementation of rectification plans	Jurisdiction area	R 0		✓													
1.1	3	IDP2012/13	Service delivery and infrastructure development	Water	Implementation of WC&DM demand management stratgie in Niekerkshoop and Masterplan for Prieska and Marydale.	Jurisdiction area	R 1 709 800			✓												✓	
1.1	4	IDP2012/13	Service delivery and infrastructure development	Water	Development of policies and water services provision contracts	Jurisdiction area	R 0						✓										
1.1	5	IDP2012/13	Service delivery and infrastructure development	Water	Bulk water supply provision from the Orange River to Marydale	Marydale	R 500 000	✓			✓									✓			
1.1	6	IDP2012/13	Service delivery and infrastructure development	Water	926:Marydale Upgrading of water supply infrastructure and Water reticulation project	Marydale	R 5 099 000	✓													✓		
1.1	6	IDP2012/13	Service delivery and infrastructure development	Water	Feasibility study and Masterplan on internal water supply network in Marydale	Marydale	R 440 000	✓														✓	
1.1	7	new project list	Service delivery and infrastructure development	Water	Build pipeline from Orange River to Niekerkshoop for Bulk water supply	Niekerkshoop	R 350 000	✓												✓			
1.1	7	new project list	Service delivery and infrastructure development	Water	Develop additional underground Water Sources in Niekerkshoop	Niekerkshoop	R 0				✓									✓			
1.1	8	IDP2012/13	Service delivery and infrastructure development	Water	Refurbishment of Prieska water treatment works and internal water supply network	Prieska	R 220 000	✓														✓	
1.1	9	new project list	Service delivery and infrastructure development	Water	Build Bulk Water Supply from Prieska Water works into reticulation network to Townships in Prieska	Prieska	R 0						✓								✓		
1.1	10	new project list	Service delivery and infrastructure development	Water	Upgrade of Water Works in Prieska	Prieska	R 0						✓										
1.1	11	IDP2012/13	Service delivery and infrastructure development	Water	House connections to informal housing in Niekerkshoop	Niekerkshoop	R 0		✓														
1.2	1	IDP2012/13	Service delivery and infrastructure development	Sanitation	Development of a Operation and Maintenance plan addressing crises and proactive maintenance	Jurisdiction area	Completed						✓										
1.2	2	IDP2012/13	Service delivery and infrastructure development	Sanitation	Finalisation of the Wastewater risk abatement plan and implementation of rectification plans (Green drop support)	Jurisdiction area	R 0		✓														
1.2	3	IDP2012/13	Service delivery and infrastructure development	Sanitation	Development of policies and sanitation services provision contracts	Jurisdiction area	R 0						✓										
1.2	4	IDP2012/13	Service delivery and infrastructure development	Sanitation	Eradication of nearly 195 bucket toilets in Marydale	Marydale	R 0						✓										
1.2	6	MIG	Service delivery and infrastructure development	Sanitation	MIG 1169:MARYDALE: Upgrading of Waste water treatment works in Marydale	Marydale	R 6 882 049	✓													✓		
1.2	7	new project list	Service delivery and infrastructure development	Sanitation	Sanitation - Upgrading of VIP to full borne systems	Marydale	R 0						✓										
1.2	8	new project list	Service delivery and infrastructure development	Sanitation	Sanitation - Upgrading of VIP to full borne systems	Niekerkshoop	R 0						✓										
1.2	10	new project list	Service delivery and infrastructure development	Sanitation	Upgrading of Sewerage Network (industrial area) in Prieska	Prieska	R 0					✓									✓		
1.2	11	MIG	Service delivery and infrastructure development	Sanitation	Upgrade of Prieska Sewerage Works	Prieska	Completed																
1.2	12	IDP2012/13	Service delivery and infrastructure development	Sanitation	Development of Business plans to address all the sanitation needs in the area	Jurisdiction area	R 0		✓														
1.3	1	Waste Management	Service delivery and infrastructure development	Waste management	Extend services to un services areas	Jurisdiction area	R 0					✓											
1.3	2	Waste Management	Service delivery and infrastructure development	Waste management	Replace and maintain Waste collection fleet	Jurisdiction area	R 0					✓									✓		
1.3	3	Waste Management	Service delivery and infrastructure development	Waste management	Revise bylaws to address current municipal situation on illigal dumping	Jurisdiction area	R 0					✓											
1.3	4	Waste Management	Service delivery and infrastructure development	Waste management	Develop and implement a Waste minimisation strategy (recycling and minimisation)	Jurisdiction area	R 0					✓											
1.3	5	Waste Management	Service delivery and infrastructure development	Waste management	Authorise Niekerkshoop and Marydale disposal sites	Jurisdiction area	R 0		✓														
1.3	6	MIG	Service delivery and infrastructure development	Waste management	924:Marydale Upgrading of Solid waste	Marydale	R 1 824 000	✓													✓		
1.3	7	MIG	Service delivery and infrastructure development	Waste management	923:Prieska Upgrading of Solid Waste	Prieska	R 2 166 000	✓													✓		
1.3	8	IDP2012/13	Service delivery and infrastructure development	Waste management	Development of a Air Quality Management plan	Jurisdiction area	R 0				✓												
1.4	1	IDP2012/13	Service delivery and infrastructure development	Energy	Electrical Supply for 206 Households in Prieska	Prieska	R 3 420 000	✓										✓					
1.4	1	IDP2012/13	Service delivery and infrastructure development	Energy	Develop a Energy Master plan	Jurisdiction area	R 0						✓										
1.4	2	IDP2012/13	Service delivery and infrastructure development	Energy	Conduct S78 investigation	Jurisdiction area	Completed																
1.4	3	IDP2012/13	Service delivery and infrastructure development	Energy	Development of a Operation and Maintenance plan addressing crises and proactive maintenance	Jurisdiction area	R 0						✓										
1.4	7	new project list	Service delivery and infrastructure development	Energy	Upgrading of Electrical Network in Prieska	Prieska	R 0					✓											
1.4	8	new project list	Service delivery and infrastructure development	Energy	Development of Light Industrial Area	Prieska	R 0						✓										

KPA	Section nr	Source	Objective	Strategies	Projects	Area	Budget	2012 / 2013		2013 / 2014		Wishlist		Finance Management Grant	Municipal Systems Improvent Grant	Equitable Share	EPWP	INEP Eskom	Regional Bulk Infratructure	MIG	ACIP	Sports, Arts and Culture (Library and Sports)
1.4	4, 5, 6	MIG	Service delivery and infrastructure development	Energy	442: Prieska/Marydale/ Niekerkshoop High Mast lighting	Prieska, Marydale, Niekerkshoop	R 2 882 013	✓												✓		
1.5	1	IDP2012/13	Service delivery and infrastructure development	Roads	Development of an Integrated transport plan	Jurisdiction area	R 0						✓									
1.5	2	IDP2012/13	Service delivery and infrastructure development	Roads	Development of an action plan based on the Classication of Municipal roads Document	Jurisdiction area	R 0						✓									
1.5	3	IDP2012/13	Service delivery and infrastructure development	Roads	Development of a Operation and Maintenance plan addressing crises and proactive maintenance	Jurisdiction area	R 0						✓									
1.5	4	IDP2012/13	Service delivery and infrastructure development	Roads	Replace and maintain fleet and equipment	Jurisdiction area	R 0						✓									
1.5	6	new project list	Service delivery and infrastructure development	Roads	Improve Road Infrastructure and Maintenance Public Excess Roads	Marydale	R 0						✓									
1.5	7	new project list	Service delivery and infrastructure development	Roads	Improve Public Transport	Marydale	R 0						✓									
1.5	10	new project list	Service delivery and infrastructure development	Roads	Improve Road Infrastructure and Maintenance Public Works	Niekerkshoop	R 0						✓									
1.5	11	new project list	Service delivery and infrastructure development	Roads	Upgrading and Tarring of Prieska Excess Roads	Prieska	In Process	✓											✓			
1.5	12	new project list	Service delivery and infrastructure development	Roads	Improve Road Infrastructure and Maintenance Public Works	Prieska	R 0						✓									
1.5	13	new project list	Service delivery and infrastructure development	Roads	Upgrading/ Safety of Frans-Loots Bridge	Prieska	R 0						✓									
1.5	14	new project list	Service delivery and infrastructure development	Roads	Upgrading of Hawkers and Taxi Rank in Prieska	Prieska	R 0						✓									
1.5	17	MIG	Service delivery and infrastructure development	Roads	276:Prieska Access Roads	Prieska	R 3 772 000	✓												✓		
1.5	18	MIG	Service delivery and infrastructure development	Roads	1028:Prieska,Marydale & Niekerkshoop:Upgrading of Gravel streets	Prieska, Marydale, Niekerkshoop	R 0			✓										✓		
1.6	1	IDP 2012/13	Service delivery and infrastructure development	Stormwater management	Development of a stormwater management plan	Jurisdiction area	R 0						✓									
1.7	1	IDP 2012/13	Service delivery and infrastructure development	Housing	Development of an Integrated housing plan	Jurisdiction area	R 0						✓									
1.7	2	ID 2012/13	Service delivery and infrastructure development	Housing	Finalisation of the Cader housing project in Marydale	Marydale	R 0						✓									
1.7	3	new project list	Service delivery and infrastructure development	Housing	Provision of Service sites in all Three Towns	Jurisdiction area	R 0						✓									
1.7	3	new project list	Service delivery and infrastructure development	Housing	Planning and surveying of Services Sites	Jurisdiction area	R 0						✓									
1.7	4	new project list	Service delivery and infrastructure development	Housing	Provision of Low cost and Economic Housing	Jurisdiction area	R 0						✓									
1.8	1	IDP 2012/13	Service delivery and infrastructure development	Health	Increase Nurse / State Doctors for Siyathemba Area	Jurisdiction area	R 0						✓									
1.8	2	new project list	Service delivery and infrastructure development	Health	Build a Day Hospital in Nierkerskhoop with the necessary equipment	Niekerkshoop	R 0						✓									
1.8	3	IDP 2012/13	Service delivery and infrastructure development	Health	Improve ambulance service in Niekerkshoop	Niekerkshoop	R 0						✓									
1.8	4	IDP 2012/13	Service delivery and infrastructure development	Health	Develop implementation strategy of Prieska's Community health centre	Prieska	R 0						✓									
1.10	1	IDP 2012/13	Service delivery and infrastructure development	Safety	Development of disaster management plan	Jurisdiction area	R 0						✓									
1.11	1	IDP2012/13	Service delivery and infrastructure development	General	Compilation of a credible Spatial Development Framework **(SDF)** to guide all developments within the Municipal area	Jurisdiction area	R 0						✓									
1.11	2	IDP2012/13	Service delivery and infrastructure development	General	Development of a strategy to manage and utilise commanage area in municipality	Jurisdiction area	R 0						✓									
1.11	3	new project list	Service delivery and infrastructure development	General	Develop a Technical school for bilinguals at unused Thembelihle School	Jurisdiction area	R 0						✓									
1.11	4	new project list	Service delivery and infrastructure development	General	Improve facilities for the disabled people in Siyathemba	Jurisdiction area	R 0						✓									
1.11	6	new project list	Service delivery and infrastructure development	General	Upgrading of Sport facilities	Jurisdiction area	R 0						✓									
1.11	7	new project list	Service delivery and infrastructure development	General	Erect information centre to promote Tourism in Siyathemba	Jurisdiction area	R 0						✓									
1.11	8	MIG	Service delivery and infrastructure development	General	928:Marydale Expansion of existing cemetery	Marydale	R 2 835 364	✓												✓		
1.11	12	new project list	Service delivery and infrastructure development	General	Erect information science to promote Tourism in Siyathemba	Jurisdiction area	R 0						✓									
1.11	14	new project list	Service delivery and infrastructure development	General	Develop of New Cemetery in Prieska	Prieska	R 2 136 325	✓												✓		
1.11	16	new project list	Service delivery and infrastructure development	General	Upgrading and Improvement of Municipal Halls - EPWP	Prieska	R 0			✓												
1.11	17	MIG	Service delivery and infrastructure development	General	927:Prieska New Cemetries Feasibility study	Prieska	Completed															
2	1	new project list	Public participation and good governance	Public participation and good governance	Development of an internal communication strategy and personal relations policy between divisions in the LM as well as between politicians and officials.	Municipal	R 0				✓											
2	2	TAS	Public participation and good governance	Public participation and good governance	Development of a Integrated communication strategy	Municipal	R 0		✓													
2	3	Performance management	Public participation and good governance	Public participation and good governance	To improve the safety and security of residents	Jurisdiction area	R 0						✓									
2	4	TAS	Public participation and good governance	Governance Structures	Train Ward committees that is not fully empowered and identify spokesperson to attend meetings	Jurisdiction area	R1000.00 PER WARD MEMBER * 9	✓														
2	5	TAS	Public participation and good governance	Governance Structures	Appointment of CDWs vs. the number of wards	Jurisdiction area	R 0		✓													

KPA	Section nr	Source	Objective	Strategies	Projects	Area	Budget	2012 / 2013		2013 / 2014		Wishlist		Finance Management Grant	Municipal Systems Improvent Grant	Equitable Share	EPWP	INEP Eskom	Regional Bulk Infratructure	MIG	ACIP	Sports, Arts and Culture (Library and Sports)
2	6	TAS	Public participation and good governance	Governance Structures	Roll out of strategy and guidelines with regards to the establishment of the Oversight Comittee for Council	Municipal	R 0		✓													
2	7	TAS	Public participation and good governance	Governance Structures	Esthablish a proper Municipal complaints system	Municipal	R 0		✓		✓		✓									
2	8	TAS	Public participation and good governance	Governance Structures	Enhance Front desk interface to be more Client friendly	Municipal	R 0		✓		✓		✓									
2	9	TAS	Public participation and good governance	Governance Structures	SLA with the District municipality to assist with special groups such as HIV/AIDS, Youth, Violence against Women	Municipal	R 0				✓											
2	10	TAS	Public participation and good governance	Governance Structures	Enhancements to the Siyathemba Newsletter and website	Jurisdiction area	R 0		✓													
2	11	IDP2012/13	Public participation and good governance	Governance Structures	Roll out of the Library action plan	Jurisdiction area	R 690 000	✓														✓
3	1		Institutional development and Transformation	Institutional development and Transformation	Recruitment, Selection and Suspension of employees	Jurisdiction area	R 0		✓													
3	2		Institutional development and Transformation	Institutional development and Transformation	Finalize process of appointment of debt collection service provider	Jurisdiction area	R 0		✓													
3	3		Institutional development and Transformation	Institutional development and Transformation	Improve Staff Minimum Competency Levels	Jurisdiction area	R 0		✓		✓		✓									
3	4	TAS	Institutional Development and Transformation	Institutional Development and Transformation	Adopt all necesary Strategies, Plans, Reports and Systems by Council	Jurisdiction area	R 0		✓		✓		✓									
3	5	TAS	Institutional Development and Transformation	Institutional Development and Transformation	Establish a Functional Labour Forum	Jurisdiction area	R 0		✓		✓											
3	6	Performance management	Institutional Development and Transformation	Institutional Development and Transformation	Adherance to the Municipality's employment equity plan	Jurisdiction area	R 0		✓													
3	7	IDP2012/13	Institutional Development and Transformation	Institutional Development and Transformation	Development of a Integrated Human Resource strategy and staff retention and attraction strategy	Jurisdiction area	R 0		✓													
3	8	IDP2012/13	Institutional development and Transformation	Institutional development and Transformation	Roll out of the Performance management system	Jurisdiction area	R 0		✓													
4	1	TAS	Financial Viability	Financial Viability	Execute Phase 2 of the Asset management programme	Municipal	R 0		✓													
4	2	TAS	Financial Viability	Financial Viability	The employment of 6 interns to assist within the Supply Chain Management Unit as well as to be capacitated in the operations of the financial division	Jurisdiction area	R 576 000	✓			✓		✓	✓								
4	3	Performance management	Financial Viability	Financial Viability	To increase the payment for services	Jurisdiction area	R 0		✓		✓		✓									
4	4	Performance management	Financial Viability	Financial Viability	Manage expenditure and income in accordance with the approved budget	Municipal	R 0		✓		✓		✓									
4	5	Performance management	Financial Viability	Financial Viability	To improve the financial viability of the municipality	Municipal	R 300 000	✓			✓			✓								
4	6	IDP2012/13	Financial viability	Financial viability	Improve fully compliant GRAP AFS - Tender	Municipal	R 0		✓													
4	7	IDP2012/13	Financial viability	Financial viability	Operation Clean Audit	Municipal	R 400 000	✓			✓			✓								
4	8	IDP2012/13	Financial viability	Financial viability	Improve Asset register / Compliance MPRA	Municipal	R 0		✓		✓											
4	9	IDP2012/13	Financial viability	Financial viability	Replacement of Plessey electricity meters with Conlog meters	Municipal	R 200 000	✓							✓							
4	10	IDP2012/13	Financial viability	Financial viability	Initiative Valuation Roll	Municipal	R 400 000	✓						✓	✓							
4	11	IDP2012/13	Financial viability	Financial viability	Maintenance of operating systems e.g. TGIS and Sabata	Municipal	R 319 000	✓						✓								
4	12	IDP2012/13	Financial viability	Financial viability	Revision of tarrif structure	Municipal	R 0		✓													
4	13	IDP2012/13	Financial viability	Financial viability	Internal Audit fees	Municipal	R 105 000	✓						✓								
5	1	IDP2012/13	LED	Local economic development	Approval of the LED strategy	Municipal	R 0															
5	2	IDP2012/13	LED	Local economic development	Development of an action plan (with priorities) to execute the recommendations made in the strategy.	Municipal	R 0															
5	3	IDP2012/13	LED	Local economic development	Develop Project execution plans for the 3 Anker development projects	Municipal	R 0															
5	4		LED	Local economic development	Pursue the Developed of "Die Bos" as a Tourist destination	Jurisdiction area	R 0		✓													
5	5		LED	Local economic development	Avail 6 500ha of Land for Solar Development Park and Investment	Jurisdiction area	R 0		✓		✓		✓									
5	6		LED	Local economic development	Mineral Water bottling plant in Prieska	Jurisdiction area	R 0						✓									
5	7		LED	Local economic development	Development (Alluvial) Diamond Development	Jurisdiction area	R 0						✓									
5	8		LED	Local economic development	Manufacturing Solar and other Renewable Energy Development Zone	Jurisdiction area	R 0		✓		✓		✓									
5	9		LED	Local economic development	Agriculture Development: Cotton farming Paprika Development	Jurisdiction area	R 0						✓									
5	10		LED	Local economic development	Essential Oils Development	Jurisdiction area	R 0						✓									
5	11		LED	Local economic development	Establish a Development Corporation (SPV) for Siyathemba	Jurisdiction area	R 0		✓		✓											
5	12		LED	Local economic development	Create and access strategy for the LED opportunities in Siyathemba	Jurisdiction area	R 0		✓		✓		✓									
5	13		LED	Local economic development	Set up a program to Improve Knowledge of the Natural and Cultural assets	Jurisdiction area	R 0						✓									
5	14		LED	Local economic development	SMME's Development	Jurisdiction area	R 0						✓									

KPA	Section nr	Source	Objective	Strategies	Projects	Area	Budget	2012 / 2013		2013 / 2014		Wishlist		Finance Management Grant	Municipal Systems Improvent Grant	Equitable Share	EPWP	INEP Eskom	Regional Bulk Infratructure	MIG	ACIP	Sports, Arts and Culture (Library and Sports)
5	15		LED	Local economic development	Upgrading of LED / IEDP Strategies and adoption by Council / Aligned to the DGDS and PGDS	Jurisdiction area	R 0		✓													
5	16	new project list	Local economic development	Local economic development	Community Food Garden	Jurisdiction area	R 0						✓									
5	17	new project list	Local economic development	Local economic development	Property Development next to the Orange River	Jurisdiction area	R 0						✓									
5	18	new project list	Local economic development	Local economic development	Housing Development - BNG	Jurisdiction area	R 0						✓									
5	19	new project list	Local economic development	Local economic development	Establishing of Fish Farming projects	Jurisdiction area	R 0						✓									
5	20	new project list	Local economic development	Local economic development	SKA SA; Explore LED related opportunities	Jurisdiction area	R 0						✓									
5	21	new project list	Local economic development	Local economic development	Erection of Mineral Water bottling plant in Prieska	Jurisdiction area	R 0						✓									
5	22	new project list	Local economic development	Local economic development	Tiger Eye Development and Manufacturing	Jurisdiction area	R 0						✓									
5	23	new project list	Local economic development	Local economic development	Rural Industrialization Zone (Pixley Strategy)	Jurisdiction area	R 0						✓									
5	24	new project list	Local economic development	Local economic development	Shopping Complex	Jurisdiction area	R 0						✓									
5	25	new project list	Local economic development	Local economic development	Explore Game Farming and Meat Processing Plant	Jurisdiction area	R 0						✓									
5	26	new project list	Local economic development	Local economic development	Tannery and Leather Project in Prieska	Jurisdiction area	R 0						✓									
5	27	new project list	Local economic development	Local economic development	Explore Agriculture / Agro Development opportunities	Jurisdiction area	R 0						✓									
5	28	new project list	Local economic development	Local economic development	Paprika Development	Jurisdiction area	R 0						✓									
5	29	new project list	Local economic development	Local economic development	Essential Oils Development	Jurisdiction area	R 0						✓									
5	30	new project list	Local economic development	Local economic development	Charcoal plant	Jurisdiction area	R 0						✓									
5	31	new project list	Local economic development	Local economic development	Bevelop a BEE/SMME Strategy	Jurisdiction area	R 0						✓									
5	32	new project list	Local economic development	Local economic development	Develop a marketing and communication strategy	Jurisdiction area	R 0						✓									
5	33	new project list	Local economic development	Local economic development	Establishment of a Chicken Farm project	Jurisdiction area	R 0						✓									
5	34	new project list	Local economic development	Local economic development	To encourage basic adult education program and provide distance learning opportunities such as further education and training	Jurisdiction area	R 0						✓									
5	35	new project list	Local economic development	Local economic development	Create and access strategy for the LED opportunities in Siyathemba	Jurisdiction area	R 0				✓		✓									
5	36	new project list	Local economic development	Local economic development	Set up a program to Improve Knowledge of the Natural and Cultural assets	Jurisdiction area	R 0						✓									
5	37	new project list	Local economic development	Local economic development	Training and Literacy	Jurisdiction area	R 0						✓									
5	38	new project list	Local economic development	Local economic development	Centre of Excellence to develop different Sporting Codes	Jurisdiction area	R 0						✓									
5	39	new project list	Local economic development	Local economic development	Pursue Asbestos Rehabilitation	Jurisdiction area	R 0		✓				✓									
5	40	new project list	Local economic development	Local economic development	Upgrading and Greening of Public Spaces	Jurisdiction area	R 0		✓				✓									
5	41	new project list	Local economic development	Local economic development	Cleaning of Streets; SMME's	Jurisdiction area	R 0		✓		✓		✓									
5	42	new project list	Local economic development	Local economic development	Upgrading of Museum	Jurisdiction area	R 0						✓									
5	43	TAS	Local economic development	Local economic development	Expand LED / IDP Unit; Recruit or train stuff (local people) to this Regard	Jurisdiction area	R 0		✓		✓		✓									
5	44	Performance management	Local economic development	Local economic development	To promote local economic development in the municipal area	Jurisdiction area	R 0						✓									
5	45	Performance management	Local economic development	Local economic development	Pursue Anchor Development in order to create Job opportunities	Jurisdiction area	R 0		✓		✓		✓									
6	1	new project list	General	General	Update the HIV/AIDS Strategy for Siyathemba	Jurisdiction area	R 0						✓									
6	2	new project list	General	General	Enhance Family Planning	Jurisdiction area	R 0						✓									
6	3	new project list	General	General	Build One - Stop Centres in Siyathemba	Jurisdiction area	R 0						✓									
6	4	new project list	General	General	Social workers needed for Marydale and Niekerkshoop	Jurisdiction area	R 0						✓									

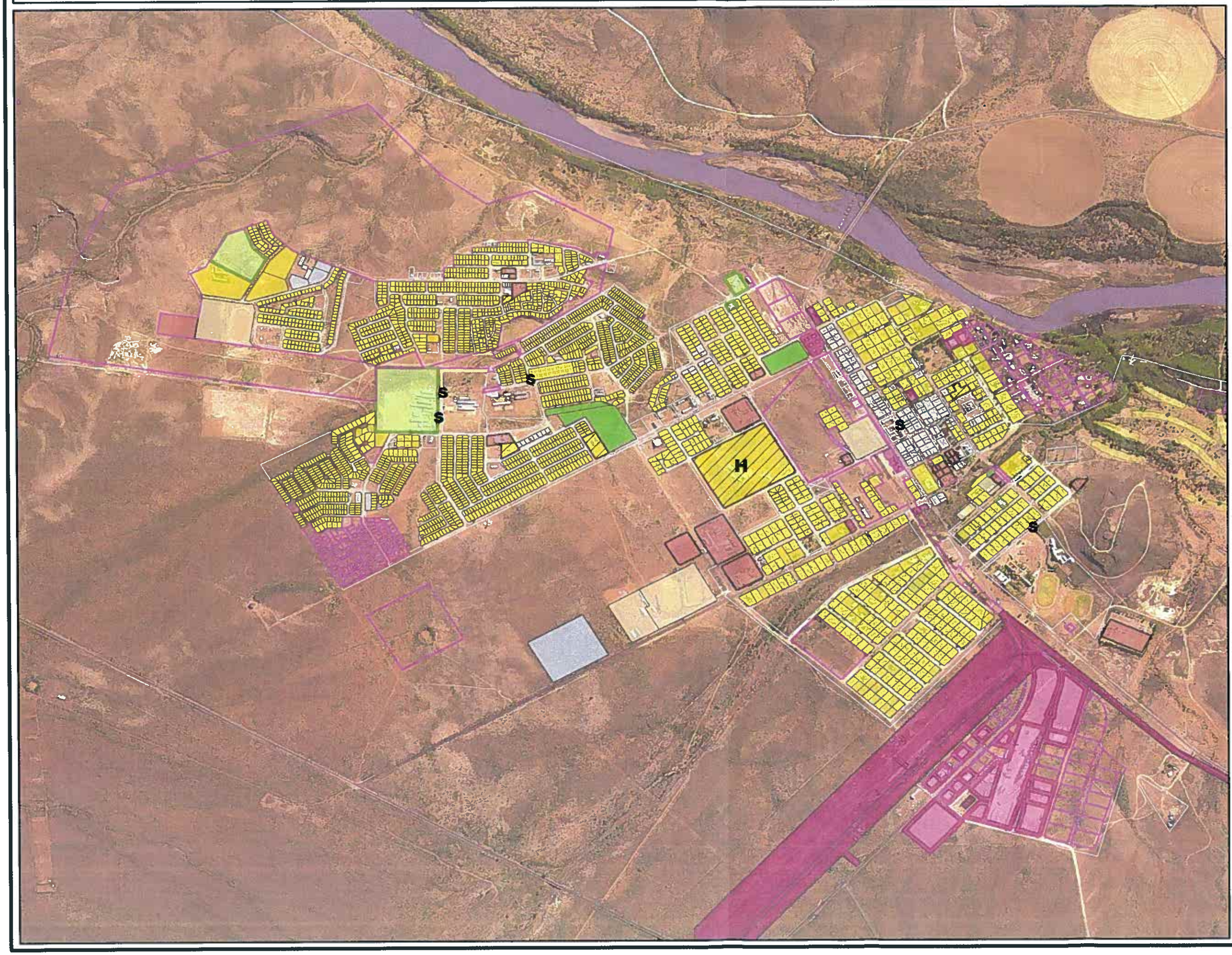
Donor Project List

Description	Strategies with Objective	Projects	Imidiate	Short Term	Medium Term	Long Term
Municipal Capacity	Planning	Compilation of a credible Spatial Development Framework **(SDF)** to guide all developments within the Municipal area	✓			
		Develop a Masterplan for Water, Sewer, Roads, Electrial, Waste, Energy and Housing in all Three Towns	✓			
		Replace Old Fleet and Buy New Fleet to Improve Services Delivery in all Three Towns.		✓		
		Develop a Water and Electricity Demand Management System.			✓	
		Align and Impproval of the LED strategy		✓		
		Create and access strategy for the LED opportunities in Siyathemba		✓		
		Revisit the IDP Plan	✓			
		Develop a Asset Management System.			✓	
	Safety	Development of Disaster and Fire Brigade Management Plan and asthablish a Reaction Unit			✓	✓
	Improve Competency Levels	Improve Data Networks and Systems			✓	
		Siyathemba Call Centre with Technologise Systems			✓	✓
		Contributing to the Additional Staff Stipends	✓	✓	✓	✓
		Operation Clean Audit		✓	✓	
		Expand LED / IDP Unit; Recruit or train stuff (local people) to this Regard	✓	✓		
		Improve or Train Staff to Improve Minimum Competency Levels			✓	✓
		Establish a Security Sytem for all Proreties and Assets of the Municipality			✓	
		Improve Traffic Control Systems, Weigh Bridge and Dept Collection			✓	
		Dept Collection	✓			
	Stimulating Municipal Income	Write off of Communities Bad Debts	✓	✓		
		Buyout / Take Over of the Eskom Network to Stimulate Municipal Income			✓	✓
		Install Municipal Prepaid Electricity Meters and Replace all Eskom electricity meters			✓	✓
		Replace all Old Plessey electricity Meters with new Conlog meters		✓	✓	✓
		Install Municipal Prepaid Water Meters to all Households		✓	✓	
Human Capacity of Comunities	Rebuild Moral Values	Develop and a School and Training facility to Prepare Workers for the Solar Park - Pay Stipends		✓		
		Erect and Improve Museum in Prieska to promote Tourism in Siyathemba			✓	✓
		Build One - Stop Centres in Siyathemba		✓		
		Develop Desent Sport Fields in all Three Towns and all 8x Schools			✓	✓
		Expansion of existing Cemeteries			✓	
	Health	Improve Hospital in Prieska and Clinics in Prieska, Niekerkshoop and Marydale			✓	
		Health Services to Rural Farms			✓	
		Improve and Buy additional ambulances for Niekerkshoop and Marydale		✓		
Service Deliveries Opportunities	Land	Buy New Land to Relocate Upcoming Farmers	✓			
	Water	Improve Comonage Land in Prieska, Marydale and Niekerkshoop			✓	
		Bulk Pipeline from the Orange River to Marydale			✓	✓
		Bulk Pipeline from the Orange River to Niekerkshoop			✓	✓
		Refurbishment of Prieska, Marydale and Niekershoop Water Reticulation Networks			✓	✓
		Build Bulk Water Supply from Prieska Water works into reticulation network to Townships in Prieska			✓	
		Upgrade of Water Works in Prieska			✓	✓
		Build a New Resivior for Water Supply in Prieska			✓	
		Upgrade Old Water Bulk Network (Old Asbestos Pipes) - by means of Cracking			✓	
		Upgrade of Bulk Water Pipeline between Prieska and Copperton			✓	✓
		Bulk Water Reticulation Prieska , Marydale and Niekerkshoop Housing Development		✓	✓	

Description	Strategies with Objective	Projects	Imidiate	Short Term	Medium Term	Long Term
Service Deliveries Opportunities	Sanitation	Eradication of nearly 195 bucket toilets in Marydale	✓			
		Bulk Sewer Reticulation Niekershoop		✓	✓	
		Bulk Sewer Reticulation Marydale		✓	✓	
		Bulk Sewer Reticulation Prieska Industrial Area		✓	✓	
		Bulk Sewer Reticulation Prieska , Marydale and Niekerkshoop Housing Development		✓	✓	
		Upgrading VIP with Bulk and Reticulation Sewer networks in Niekershoop and Marydale	✓			
		Upgrade of Niekerkshoop Sewerage Works		✓	✓	
		Upgrade of Marydale Sewerage Works		✓	✓	
		Sanitation - Upgrading of VIP to full borne systems in Marydale and Niekershoop			✓	✓
	Waste management	Develop Waste Disposal **(Diversify)** Sites Prieska, Marydale and Niekershoop			✓	
		Upgrade Solid Waste **(Diversify)** Sites Prieska, Niekerkshoop and Marydale			✓	
		Development of a Air Quality Management plan			✓	
	Energy	Expand and Upgrade Electrical Network in Prieska, Marydale and Niekerkshoop				
		Electrical Supply for 206 Households in Prieska	✓			
		High Mast lights for Prieska, Marydale and Niekerkshoop		✓	✓	
		Development of Light Industrial Area			✓	
	Roads	Resealing of All existing Excess Roads in Prieska, Marydale and Niekerkshoop	✓			
		Upgrading and Tarring all National **(r)** Roads to Stimulate Growth		✓	✓	
		Upgrading and Tarring all Local Excess Roads **(r)** Roads Prieska, Marydale and Niekerkshoop to Stimulate Growth		✓	✓	
		Upgrade and Adress all Stormwater problems in Prieska, Marydale and Niekerkshoop		✓	✓	
		Upgrading of Hawkers and Taxi Rank in Prieska			✓	✓
		Upgrade and Beterment of all Municipal and Government Buildings	✓	✓	✓	
		Landscaping and Greening of Streets in Prieska, Marydale and Niekerkshoop	✓	✓	✓	
		Road Sinage for all three Towns		✓		
	Housing	Finalisation of the Cader Housing project in Marydale	✓			
		Provision of Service sites in all Three Towns		✓		
		Planning and surveying of Services Sites		✓		
		Build almost 5 000 (Integrated) Low Cost and Houses in Prieska, Marydale and Niekerkshoop		✓		
		Install Solar Water Geysorsfor all Housholds (12500) and for each new house to be Build	✓	✓	✓	✓

Description	Strategies with Objective	Projects	Imidiate	Short Term	Medium Term	Long Term
Stimulating Growth Opportunities	LED Projects	Pursue the Developed of "Die Bos" as a Tourist destination with Weir in Orange River		✓	✓	
		Propose to Develop Infrastructure for Solar Projects in Prieska		✓	✓	
		Develop a Solar Manufacturing Development Zone		✓	✓	
		LED / Solar Lights in Municipal Buildings and Streets		✓	✓	
		Airport with Tarring of Runways		✓	✓	
		100Ha Cotton farming under Irrigation Farming		✓	✓	
		Property Development for Solar Companies and Other Types		✓	✓	
		Investigate and Explore SKA related opportunities		✓	✓	
		Erect Information Centre to promote Tourism in Siyathemba		✓	✓	
		Solar Investment (To esthablish Local BEE Partners) for Local BEE Initiative		✓	✓	
		Develop a Shopping Complex		✓	✓	
	Feasibility Studies	Mineral Water bottling plant in Prieska	✓	✓	✓	
		Explore, Develop and Revitalise the Copperfields	✓	✓	✓	
		Development (Alluvial) Diamond Development	✓	✓	✓	
		Esthablish a Paprika Development Plant	✓	✓	✓	
		Essential Oils Development	✓	✓	✓	
		Establishing of Fish Farming projects	✓	✓	✓	
		Tiger Eye Benificiation Development Plant and Manufacturing	✓	✓	✓	
		Investigate Game Farming, Meat Processing Plant and Tannery	✓	✓	✓	
		Establishment of a Chicken Farm project	✓	✓	✓	
		Establish a Hidrophonics Development Plant	✓	✓	✓	
		Investigate and Explore Local HIV Medicinal Developments	✓	✓	✓	
		Project Development for all the Above			✓	✓
Stimulate Cross Sectoral Growth	Cross Sectoral Projects	Bulk Pipeline from Copperton to Vanwyksvlei / Carnavon for SKA			✓	
		Upgrading and Tarring all National **(N)** Roads to Stimulate Growth		✓	✓	
		Upgrading and Tarring all National **(R)** Roads to Stimulate Growth		✓	✓	
		Inland Port, Rail Revitalisation, De Aar		✓	✓	✓
		Rail Network around Prieska			✓	
		Smelter Plant, Iron Ore, De Aar			✓	✓
		Upgrade Rail Line between De Aar and Kuruman to secure Iron Ore as Source of Supply for De Aar Smelter Plant				
		Manufacturing Plant; Tankers, Trailers and Containers			✓	✓
		Develop Holiday Resort, Van Der Kloof. Compliment Tourism Route in Northern Cape			✓	✓
		Total				

LANDUSE MAP - PRIESKA



LEGEND

- S Schools
- \+ Clinics
- H Hospitals

LANDUSE

- Business
- Commercial
- Educational
- Government
- Industrial
- Institutional
- Public
- Recreational
- Residential
- Unknown

Locality Map

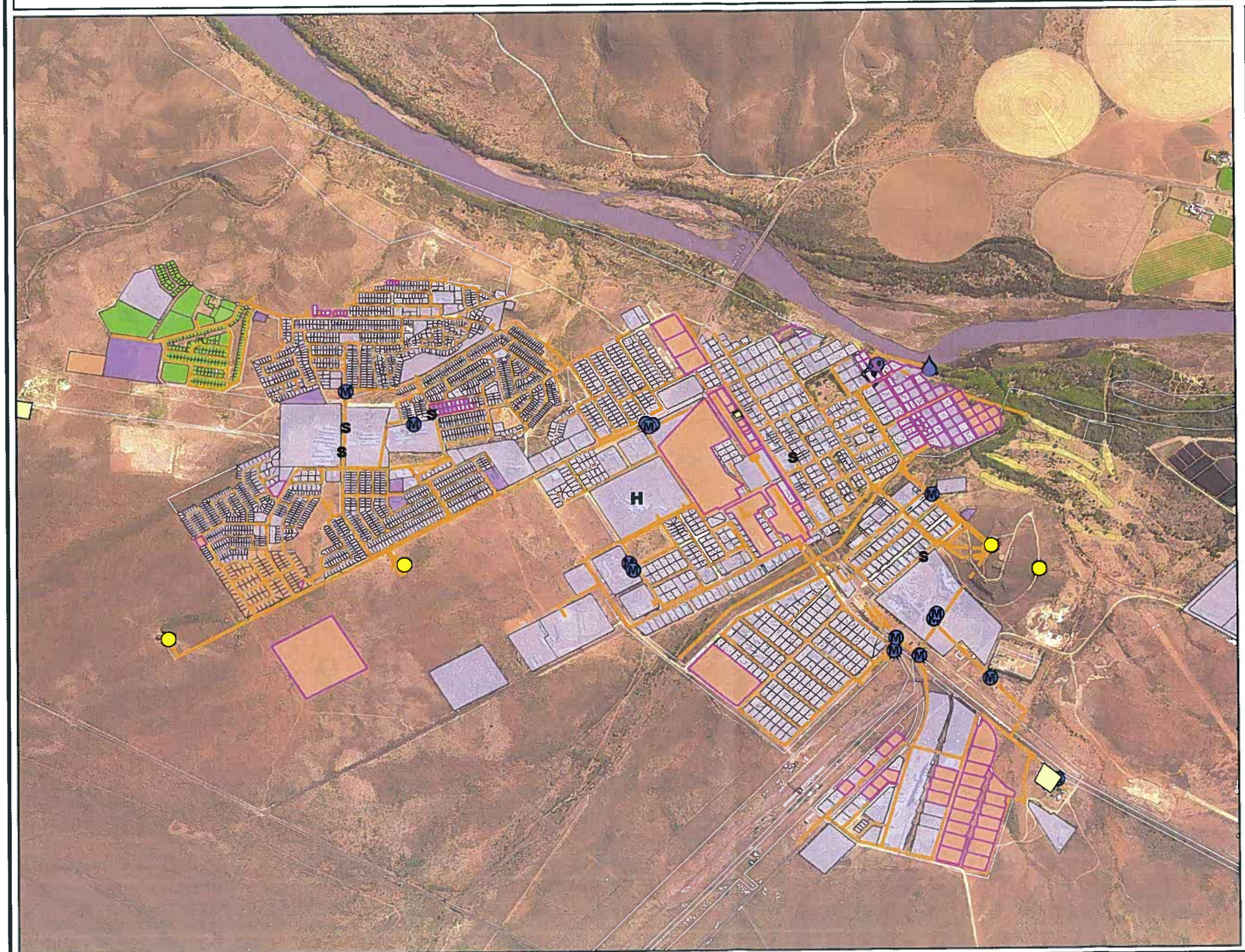
0 150 300 600 Kilometers

N

0 0.3 0.6 Kilometers

aurecon

WATER - PRIESKA



LEGEND

- House Connection
- Yard Connection
- Communal Standpipe
- Communal>200m
- None
- Unknown
- Water treatment
- Bulk Supply
- Connector
- Reticulation
- Unknown
- Reservoir
- Pump
- Bulk water meter
- Surface water
- Borehole
- Communal Standpipe
- S Schools
- ✚ Clinics
- H Hospitals

Locality Map

0 150 300 600 Kilometers

N

0 0.325 0.65 Kilometers

aurecon

SANITATION - PRIESKA

LEGEND

- S Schools
- ✚ Clinics
- H Hospitals
- Gravity
- Outfall Sewer
- Pumped
- Rising Main
- Unknown

LEVEL OF SERVICE

Basic Service

- Flush to treatment
- Conservancy Tank
- Septic Tank
- UDS
- VIP

Inadequate facilities

- Unimproved Pit
- Bucket
- None
- Unknown
- Treatment plant
- Sewer pump

Locality Map

0 150 300 600
Kilometers

N

0 0.325 0.65
Kilometers

aurecon

Prieska Electricity Network

PRIESKA 1 OF 2

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:24 000

0.5 0.25 0 0.5 Km

Key Plan
Prieska

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

Legend	Road No	Start Km	End Km	Length(Km)
	MR00780	1.700	2.700	1.000
	TR06901	17.500	18.670	1.170
	TR07901	0.000	0.540	0.540

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PRIESKA 2 OF 2

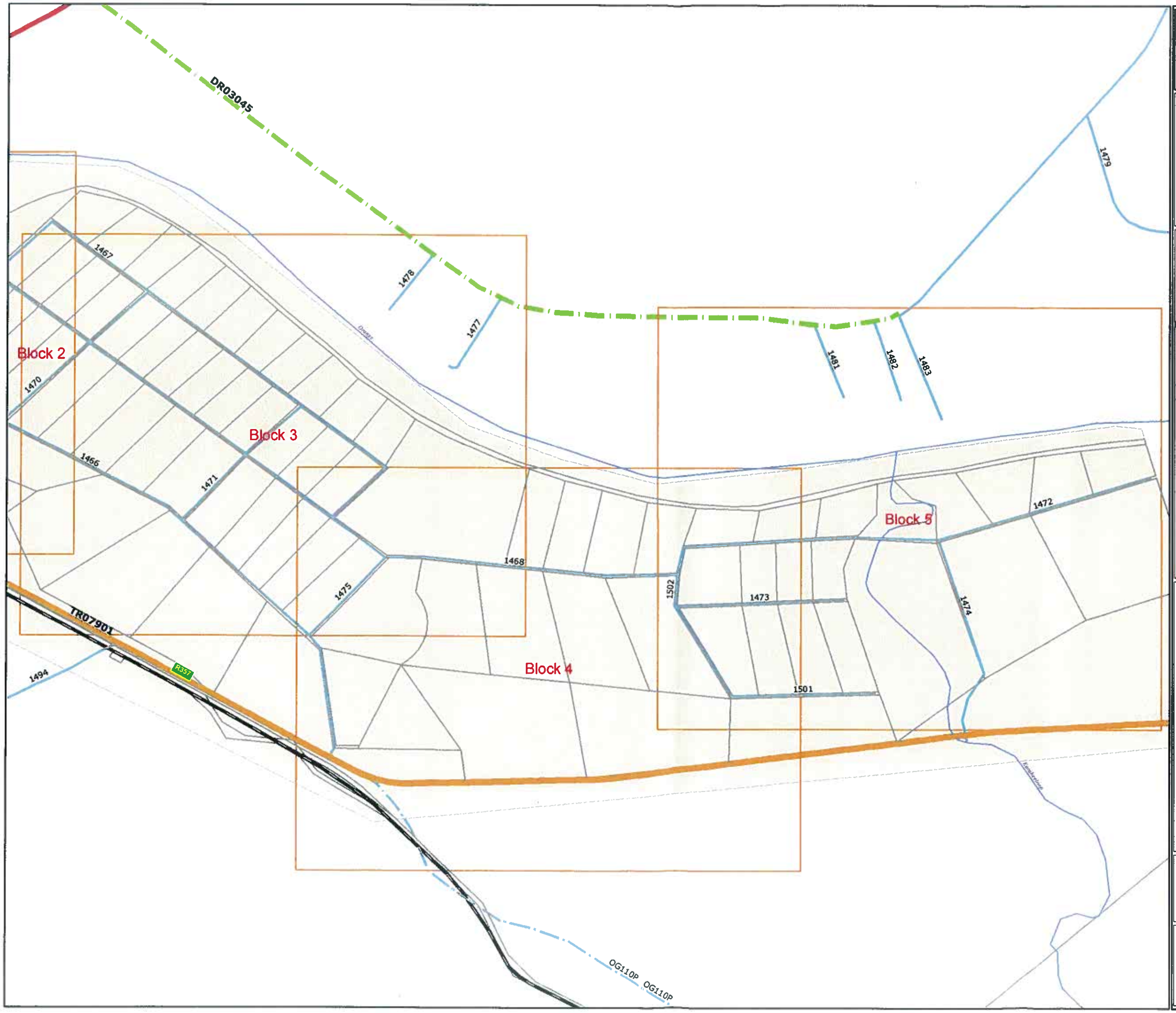
Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:24 000

0.5 0.25 0 0.5 Km



Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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PRIESKA – BLOCK 1 OF 5

Northern Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:10 500

0.25 0.125 0 0.25 Km

Block 1

Thembelihle Primary
Heuwelsig Senior Secondary
Rd Williams Primary
J.J. Dreyer Primary
Prieska Clinic
Prieska Mobile
Prieska (Bill Pickard)
Total Service Station
Prieska Police Station

Polyane
Mclean
Jakavul
Ludidi
Choko
Julie
Aaron
Mcleane
Makhozi
Segaecho
Joko
Nelani
Jansen
Greinhoudt
Bosch
Petshwa
Phillips
Fleiles
Celentos
Hector
Pieter
Damons
Dosman
Kobias
Lang Fred
Louw
Africa
Block
Pedro
Beerwinkel
Adam
Mans
Saaiman
William
Smith
Oor
Lala
Koopman
Bridge
Omega
Olien
Reef
Akasia
Conman
Asbestos
Long
Plain
Andries Pretorius
Hill
Main
Viljoen
Roos
Van Der Westhuizen
Lak
Meyer
Curch
Moord
Goetzee
Venter
Vrede
Le Roux
Macleod
De Villiers
Jaap Maree
Dwars
Kroon
Diamant
Romeo
Kroon
Grens
Van Wyk
Burger
Skool
Papegaai
Hamerkop
Aasvoel
Soetdoring
Bloekom
Wygie
Aandblom
Karoo
Aalwyn
Karee
Tieroog
Wieger
Hoof
Petunia
Doringberg
Protea
Malva
Melkbos
Gousblom
Leeubekkie
Heuningblom
Upington
Dahlia
Haakdoring
Bloubos
Skoenbok
Bliesbok
Springbok
Rabys
Sousbos
1447
1458
1500
1487
1485
1469
1491
1480
1448
1459
1453
1488
1492
1493
1452
1460
1489
1449
1450
1456
1463
1462
1451
1497
1499
1457
OG106P
MR00780
N10
R357
TR06801
3rd
4th
5th
6th
7th
Sentraal
River

Key Plan
Prieska

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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PRIESKA – BLOCK 2 OF 5

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:10 500

0.25 0.125 0 0.25 Km

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

Block 2

Prieska Primary
Prieska High
Prieska Airfield
Prieska river
Orange river

Asbestos
Long
Short Market
Dorp
Green
Plain
Andries Pretorius
Market
Hill
Church Square
Park
Niauuw
Kruger
Viljoen
Church
Church
2nd
Oranje
Stewardt
Van Riebeek
Main
Roos
Van Der Westhuizen
Lak
Meyer
Venter
Victoria
Dagbreek
Luyt
Voortrekker
Coetzer
Du Toit
Van Niekerk
Van Niekerk
Main
River
Danie Smit
1st
2nd
3rd
4th
5th
6th
7th
Sentraal
Stasie
Proudfoot
Frank
Hedley
Maritz
Proudfoot
Proudfoot
Lawrence
Todd
1495
1496
1498
1455
1464
1457
1468
1466
1470
TR06901
MR00780
MR00767
TR07901
R357

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PRIESKA – BLOCK 3 OF 5

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:10 500

0.25 0.125 0 0.25 Km

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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DR03045
1478
1477
1457
1470
1458
Block 3
1471
1456
1475
TR07901
R357
1494

PRIESKA – BLOCK 4 OF 5

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:10 500

0.25 0.125 0 0.25 Km

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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PRIESKA – BLOCK 5 OF 5

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:10 500

0.25 0.125 0 0.25 Km

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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DR03045

1481 1482 1483

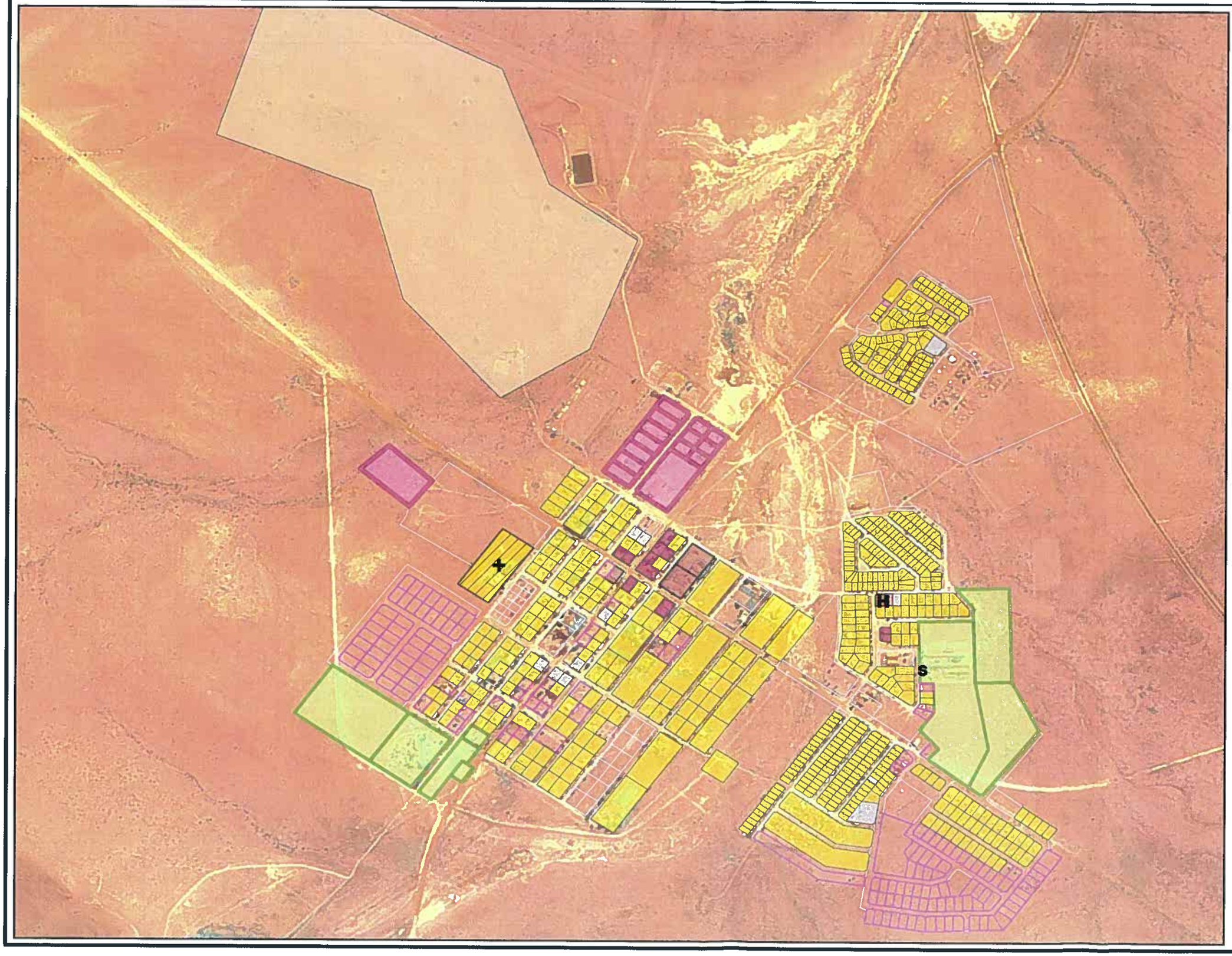
Block 5

1472 1472 1472

1468 1502 1473 1501 1474

TR07901 R357

LANDUSE MAP - MARYDALE



LEGEND

- S Schools
- + Clinics
- H Hospitals

LANDUSE

- Business
- Commercial
- Educational
- Government
- Industrial
- Institutional
- Public
- Recreational
- Residential
- Unknown

Locality Map

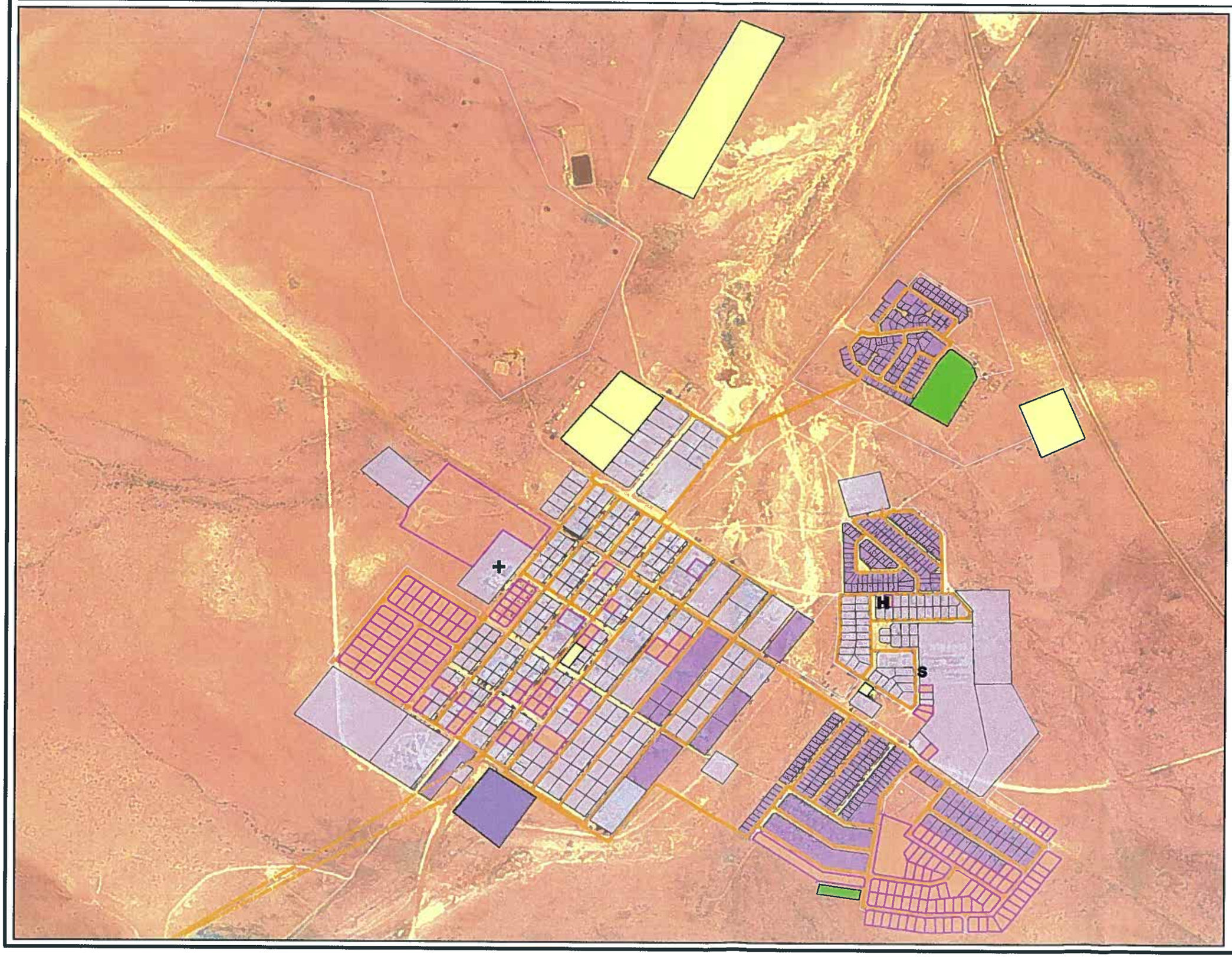
0 150 300 600
Kilometers

N

0 0.175 0.35
Kilometers

aurecon

WATER - MARYDALE



LEGEND

- House Connection
- Yard Connection
- Communal Standpipe
- Communal>200m
- None
- Unknown
- Water treatment
- Bulk Supply
- Connector
- Reticulation
- Unknown
- Reservoir
- Pump
- Bulk water meter
- Surface water
- Borehole
- Communal Standpipe
- Schools
- Clinics
- Hospitals

Locality Map

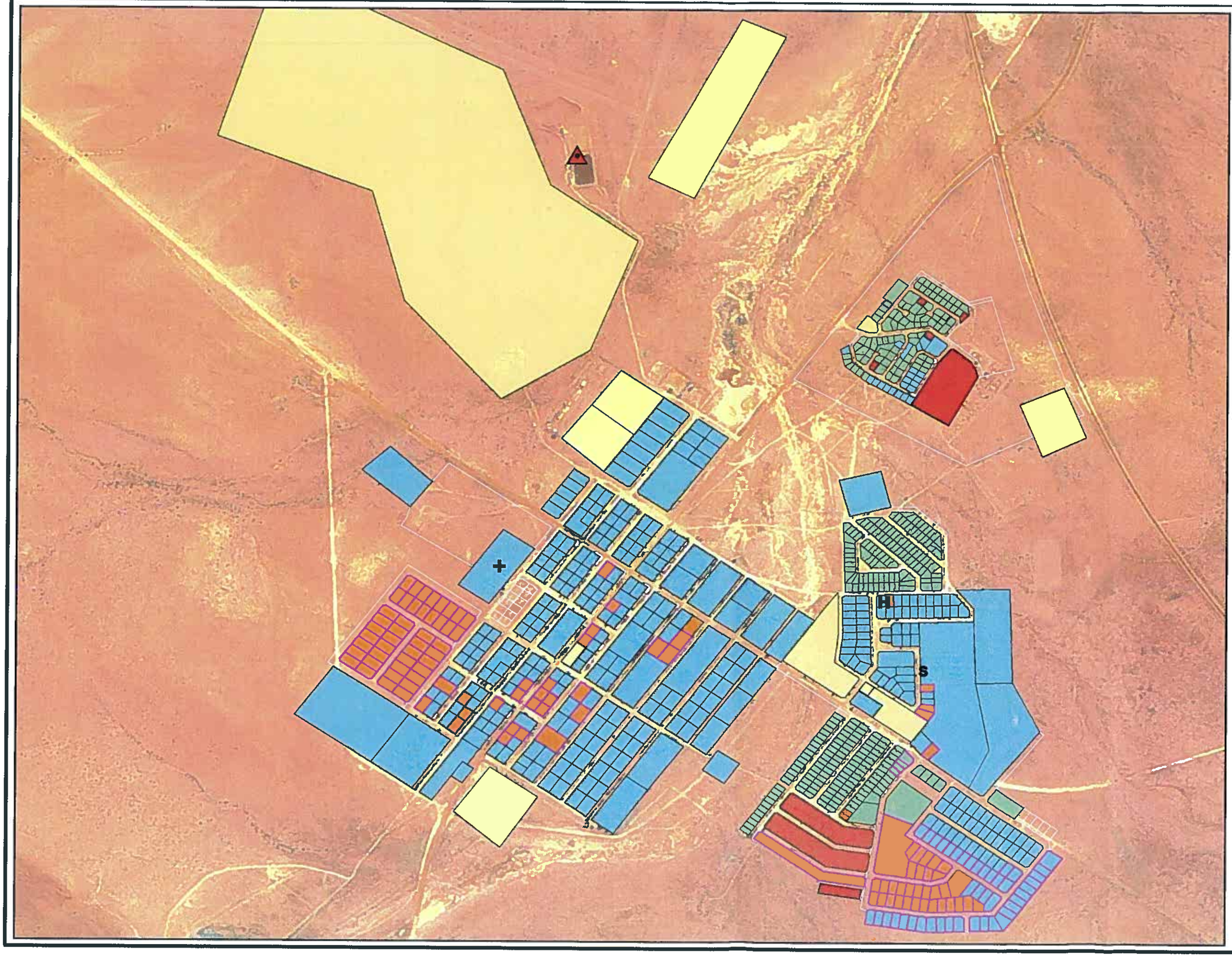
0 150 300 600
Kilometers

N

0 0.175 0.35
Kilometers

aurecon

SANITATION - MARYDALE



LEGEND

- S Schools
- \+ Clinics
- H Hospitals
- Gravity
- Outfall Sewer
- Pumped
- Rising Main
- Unknown

LEVEL OF SERVICE

Basic Service

- Flush to treatment
- Conservancy Tank
- Septic Tank
- UDS
- VIP

Inadequate facilities

- Unimproved Pit
- Bucket
- None
- Unknown
- Treatment plant
- Sewer pump

Locality Map

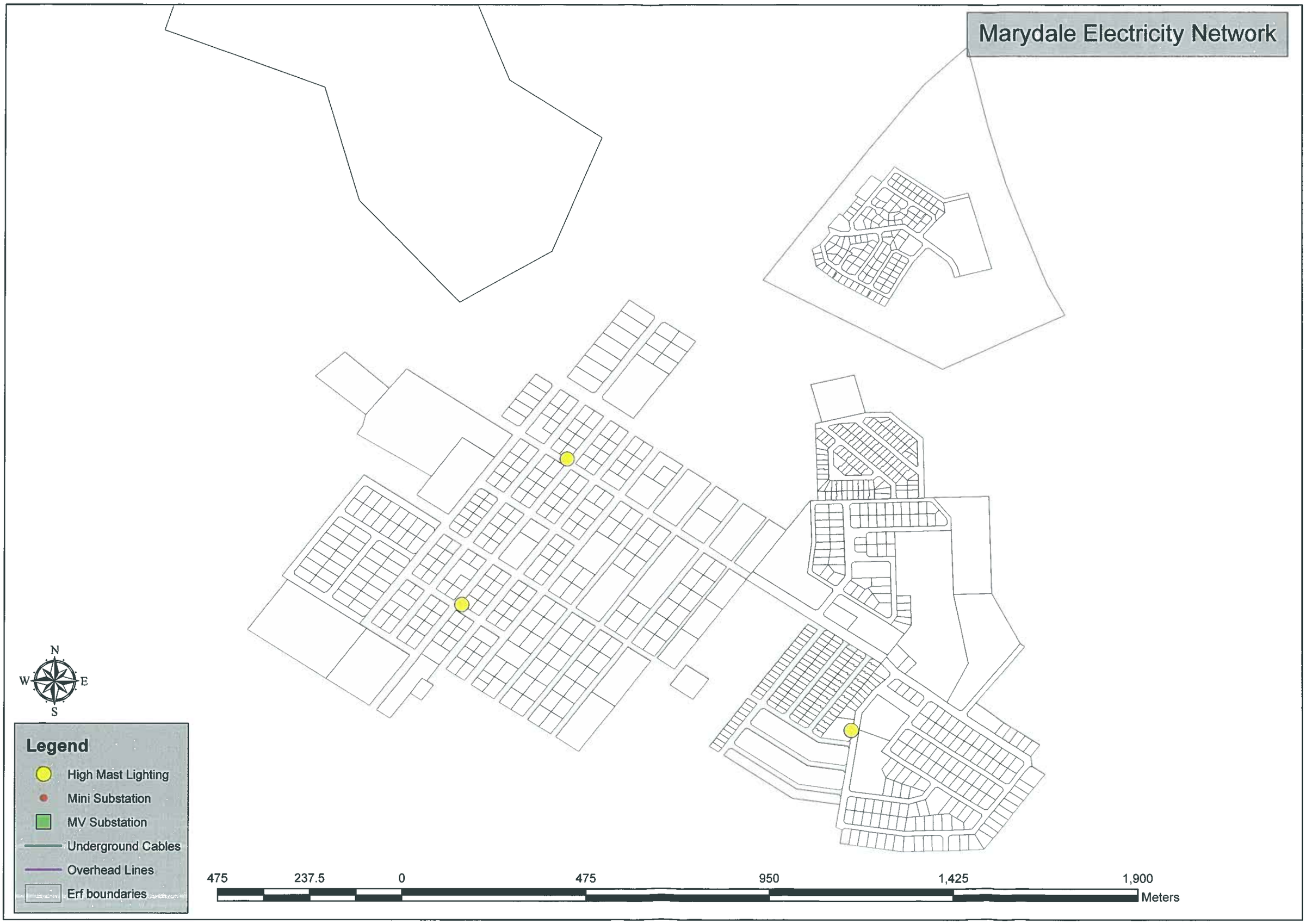
0 150 300 600 Kilometers

N

0 0.175 0.35 Kilometers

aurecon

Marydale Electricity Network



MARYDALE

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:12 500

0.3 0.15 0 0.3 Km

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B
- Not Classified

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Date: 2011-09-15
File Name: A3_Pixley ka Seme_Marydale

Marydale Landing Strip

MR00777

N10

R383

Marydale Police Station

Marydale Clinic

Sonskyn Primary

Block 1

DR03019

1097 1098 1100 1101 1102 1103

Van Renesburg, Loots, Draghoender, Prieska, Auret, Lethanie, Jeppe, Prieska, Mark, Devenish, Niekerk, Van Wyk, Jooste, Hanekom, Gilliers, Kerk, Connan, De Bruyn, Oliver, Beukes, Strauss, Pedro, Tarentaal, Skerpioen, Lang, Luderitz, Rondom, Speeman, Shweni, Bova, Hoof, Bikwani, Bosman, Maggodi, Protea, Roos, Vygie, Angelier, Rooidal, Perske, Peer, Appel, Connan, Grenaat, Kwepper, Lemoen

MARYDALE – BLOCK 1 OF 1

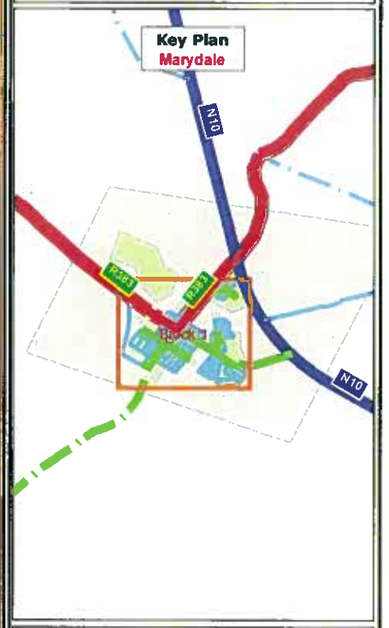
Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:6 500

0.1 0.05 0 0.1 Km



Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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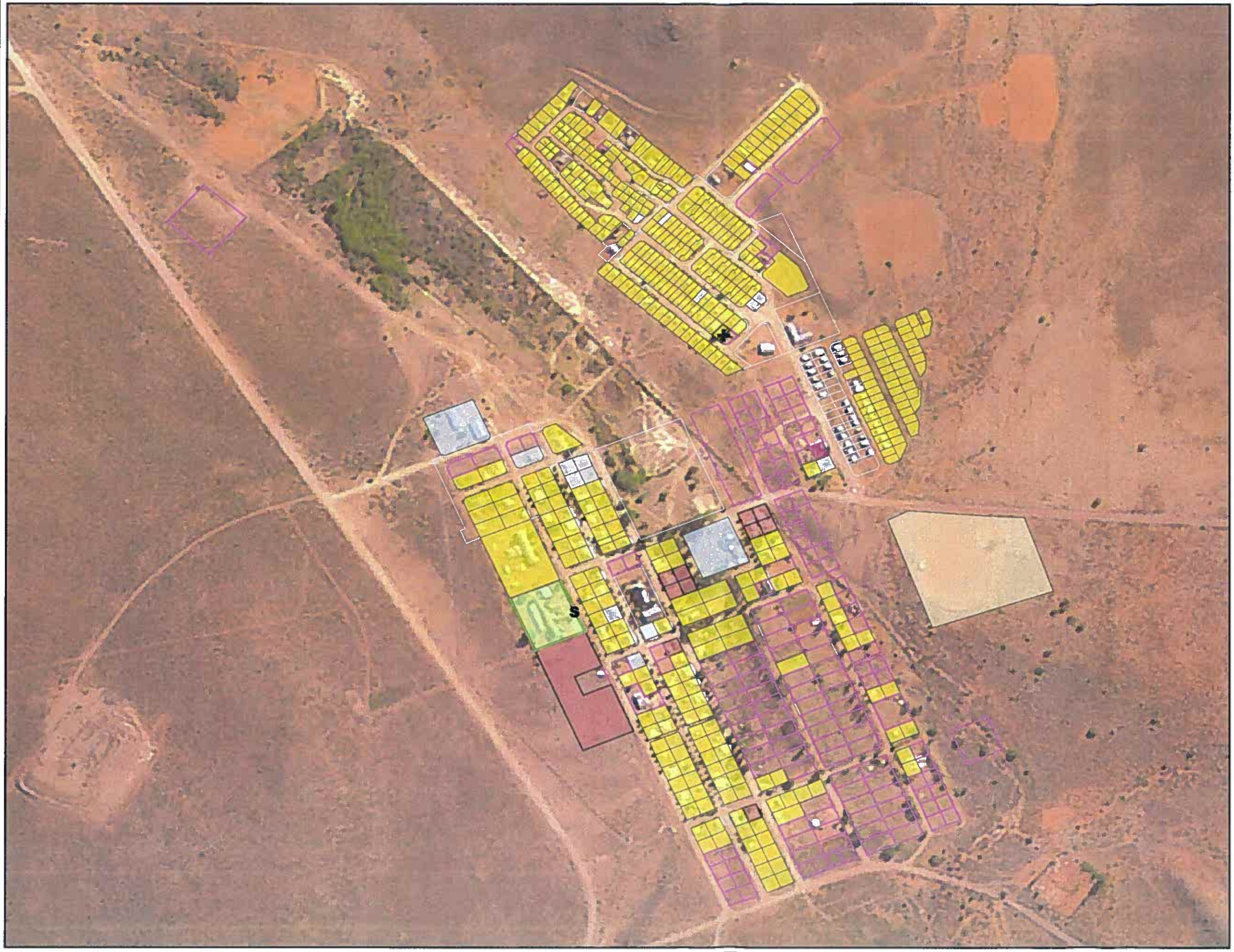
Date: 2011-09-15
File Name: A3_Pixley ka Seme_Marydale_B1

MR00777
R383
N10
Shweni
Speelman
Bova
Hoof
Bikwani
George
Bees
Bosman
Magodi
1098
1100
Cilliers
Draghoender
Niekerk
Block 1
Devenish
Marydale Police Station
DR03019
Van Rensburg
Van.Der.Westhuizen
Loots
Van Wyk
Lethanie
1097
Prieska
Mark
Auret
Hanekom
Marydale Clinic
Jeppe
Jooste
Kerk
Luderitz
Lang
Skerpioen
Rondom
Tarentaal
Oliver
Beukes
Pedro
Strauss
Sonskyn Primary
De Bruyn
Connan
Protea
1102
1101
1099
Roos
Peer
Appel
Vygie
Angeliet
Robidal
Grenaat
Kweper
Perske
Lemoen
1103

LANDUSE MAP - NIEKERKSHOOP



LEGEND

- S Schools
- + Clinics
- H Hospitals

LANDUSE

- Business
- Commercial
- Educational
- Government
- Industrial
- Institutional
- Public
- Recreational
- Residential
- Unknown

Locality Map

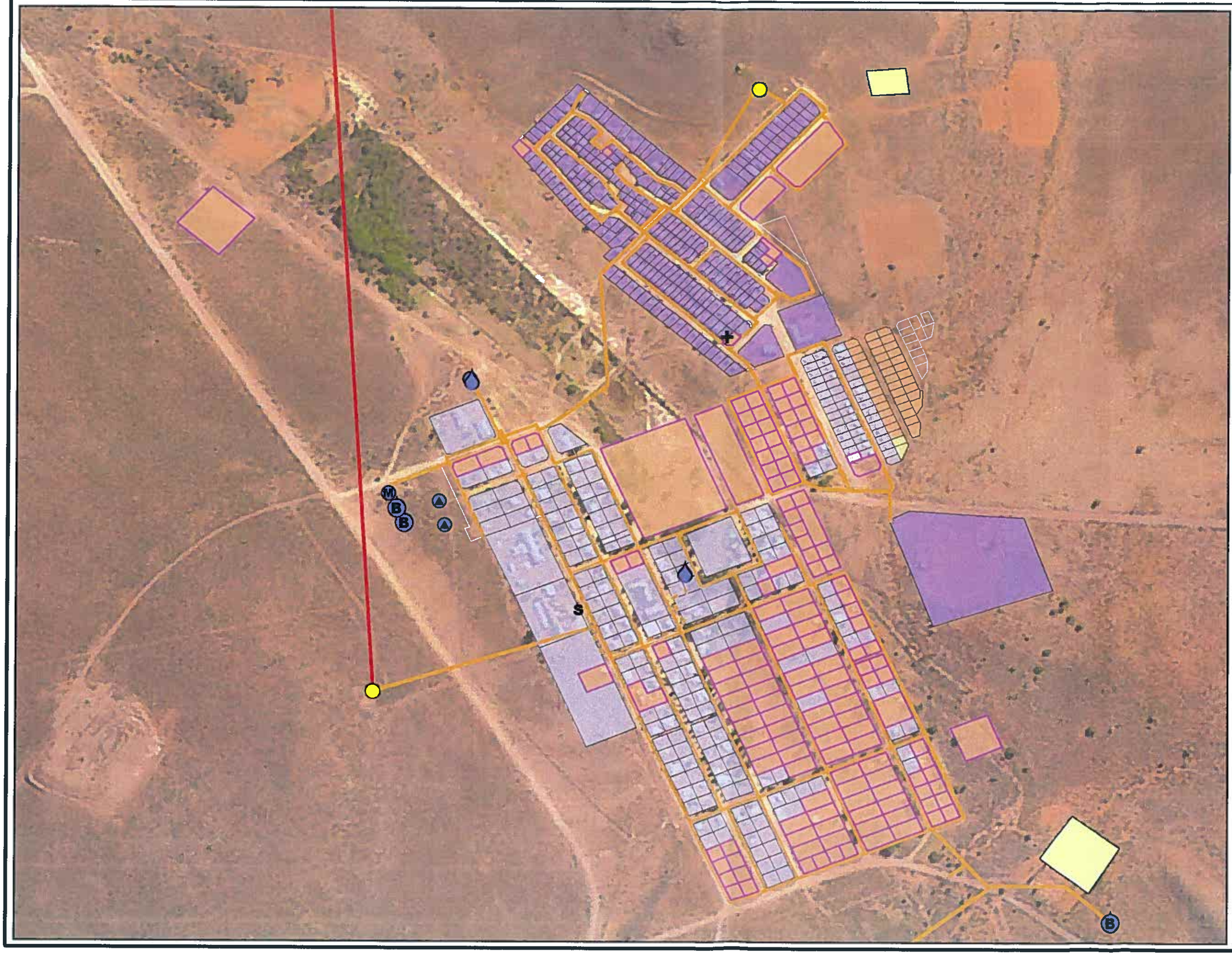
0 150 300 600
Kilometers

N

0 0.1 0.2
Kilometers

aurecon

WATER - NIEKERKSHOOP



LEGEND

- House Connection
- Yard Connection
- Communal Standpipe
- Communal>200m
- None
- Unknown
- Water treatment
- Bulk Supply
- Connector
- Reticulation
- Unknown
- Reservoir
- Pump
- Bulk water meter
- Surface water
- Borehole
- Communal Standpipe
- S Schools
- \+ Clinics
- H Hospitals

Locality Map

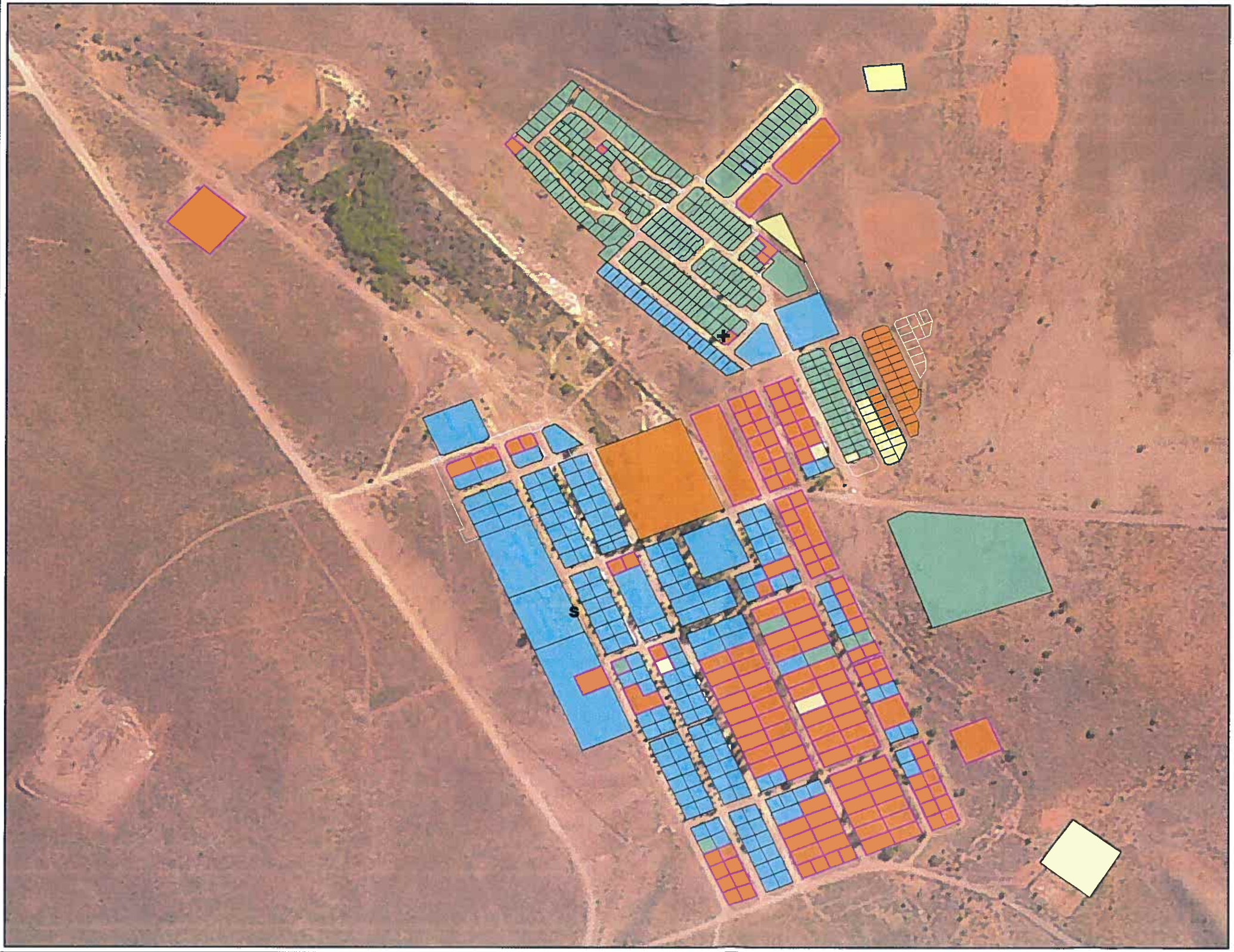
0 150 300 600
Kilometers

N

0 0.1 0.2
Kilometers

aurecon

SANITATION - NIEKERKSHOOP



LEGEND

- S Schools
- Clinics
- H Hospitals
- Gravity
- Outfall Sewer
- Pumped
- Rising Main
- Unknown

LEVEL OF SERVICE

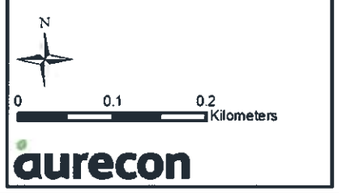
Basic Service

- Flush to treatment
- Conservancy Tank
- Septic Tank
- UDS
- VIP

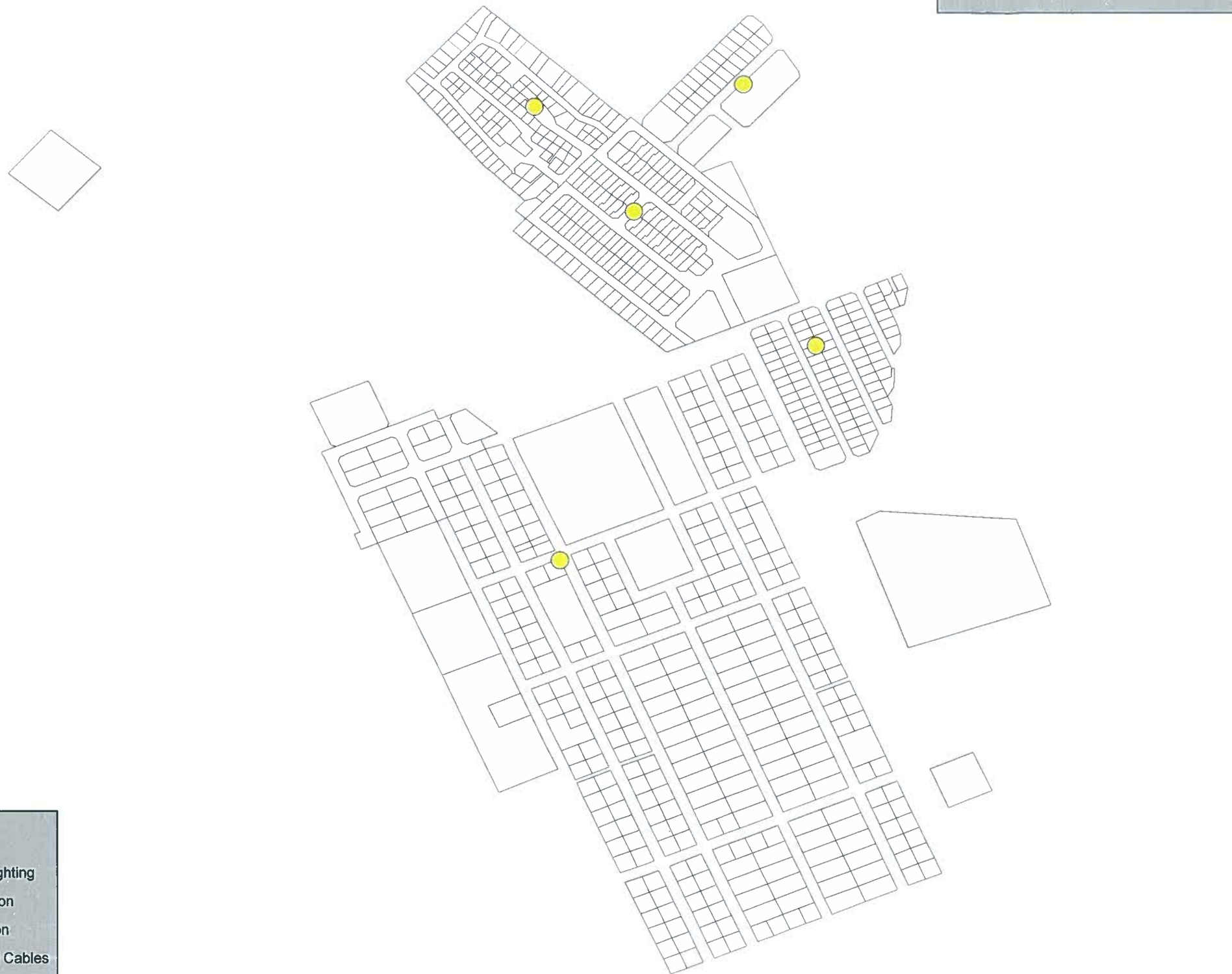
Inadequate facilities

- Unimproved Pit
- Bucket
- None
- Unknown
- Treatment plant
- Sewer pump

Locality Map



Niekerkshoop Electricity Network



N
W E
S

Legend

- High Mast Lighting
- Mini Substation
- MV Substation
- Underground Cables
- Overhead Lines
- Erf boundaries

330 165 0 330 660 990 1,320

Meters

NIEKERKSHOOP

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

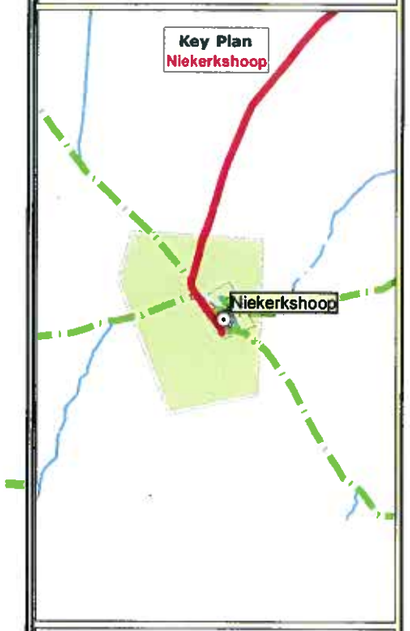
DRAFT

N
W E
S

Scale : 1:12 500

0.3 0.15 0 0.3 Km

Key Plan
Niekerkshoop



DR03034
TR06902
DR03033
DR03032
DR03030
1185
Niekerkshoop Clinic
Niekerkshoop Police Station
Niekerkshoop Mobile
Moreson Primary
Block 1
1182 1192 1180 1181 1191 1183 1179 1178 1181 1191 1178 1197 1199 1205 1201 1196 1199 1187 1186 1206 1190 1205 1203 1204 1189 1202 1177 1185

Legend	Road No	Start Km	End Km	Length(Km)
	DR03032	0.000	1.041	1.041

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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Date: 2011-09-15
File Name: A3_Pixley ka Seme_Niekerkshoop

NIEKERKSHOOP – BLOCK 1 OF 1

Northern Cape Province
Pixley ka Seme District Municipality
Siyathemba Local Municipality

DRAFT

N
W E
S

Scale : 1:5 900

0.1 0.05 0 0.1 Km

Key Plan
Niekerkshoop

Block 1

DR03033
TR06902
DR03032
DR03030
1185
1182
1195
1192
1180
1179
1181
1191
1183
1184
1194
1178
1193
1198
1200
1197
1199
Niekerkshoop Clinic
Niekerkshoop Police Station
1205
1201
1196
Niekerkshoop Mobile
1203
1186
1187
1188
Moreson Primary
1190
1206
1189
1202
1177
1204

Legend

Classes

- 1
- 2
- 3
- 4A
- 4B
- 5A
- 5C
- 5B

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Date: 2011-09-15
File Name: A3_Pixley ka Seme_Niekerkshoop_B1

Siyathemba Local Municipality

Local Economic Development Strategy

April 2012

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Section 1: Introduction

1.1. Background

Local Economic Development (LED) is an approach to sustainable economic development that encourages residents of local communities to work together to stimulate local economic activity that will result in, inter alia, an improvement in the quality of life for all in the local community.

The Department of Economic Development and Tourism in the Northern Cape has recently concluded the development of its Provincial LED Strategy in line with the Northern Cape Growth and Development Strategy. These Strategies provide the foundation for Integrated Economic Development Planning throughout the Northern Cape. To provide the necessary implementation impetus at the local level, the Siyathemba Local Municipality embarked on a process of developing its own LED Strategy in line with provincial planning imperatives.

1.2. The LED Vision for Development

The Municipality convened a community and LED role player Visioning Workshop on the 16th of September 2011. During this workshop, participants highlighted the following main visioning elements:

1. Sustainability
2. Locally owned economy
3. Local value-adding and social upliftment
4. Integrated community development

These elements were then discussed and finally packaged into the following Vision Statement:

"Ensuring long term economic sustainability through local value addition and social upliftment, as well as integrated community development. We strive towards an economy owned by local people."

This vision for Local Economic Development sets the tone for the study, provides guidance for analysis and informs the outcomes or recommendation of the Strategy.

1.3. The Purpose and Objectives of the Study

The purpose of local economic development (LED) is to build up the economic capacity of a local area to improve its economic future and the quality of life for all. It is a process by which public, business and nongovernmental sector partners work collectively to create better conditions for economic growth and employment generation to advance the economic identity, based on a local competitive and comparative economic profile.

The aim of the Siyathemba LED Strategy is to build horizontal planning and development consensus among the Local Municipality, local businesses and civil society towards building the local economy together through a shared vision. The LED Strategy will also facilitate vertical integration between local and other spheres of government to facilitate proper regional planning alignment and development coordination in the District and Province. The LED Strategy will focus on enhancing competitiveness and increasing sustainable growth while ensuring that this growth is inclusive.

The main objectives for the study have been identified as:

1. Defining LED in the context of the Siyathemba Local Municipality.
2. To develop a LED Development Framework and Strategy for the Municipality.
3. Broadly assessing the provision for LED within the municipal area and more specifically, the institutional infrastructure and programmes available to implement LED initiatives.
4. Broadly identifying economic opportunities across the Municipal area.
5. A proposed Implementation Plan to address gaps and solutions that contribute to a more coherent and coordinated LED approach.

The challenge of the project is to understand the current economic development imperatives of the Siyathemba Local Municipality, within the context of the regional and larger economy, as well as to understand the current institutional arrangements that support local economic development.

In this context the goal of the study has been formulated as follows:

To formulate a LED Strategy for the Siyathemba Local Municipality aimed at enhancing competitiveness, information dissemination, investment facilitation and trade promotion and interpret and package this as a practical implementation strategy to guide investment and trade development in line with the LED Vision and Objectives.

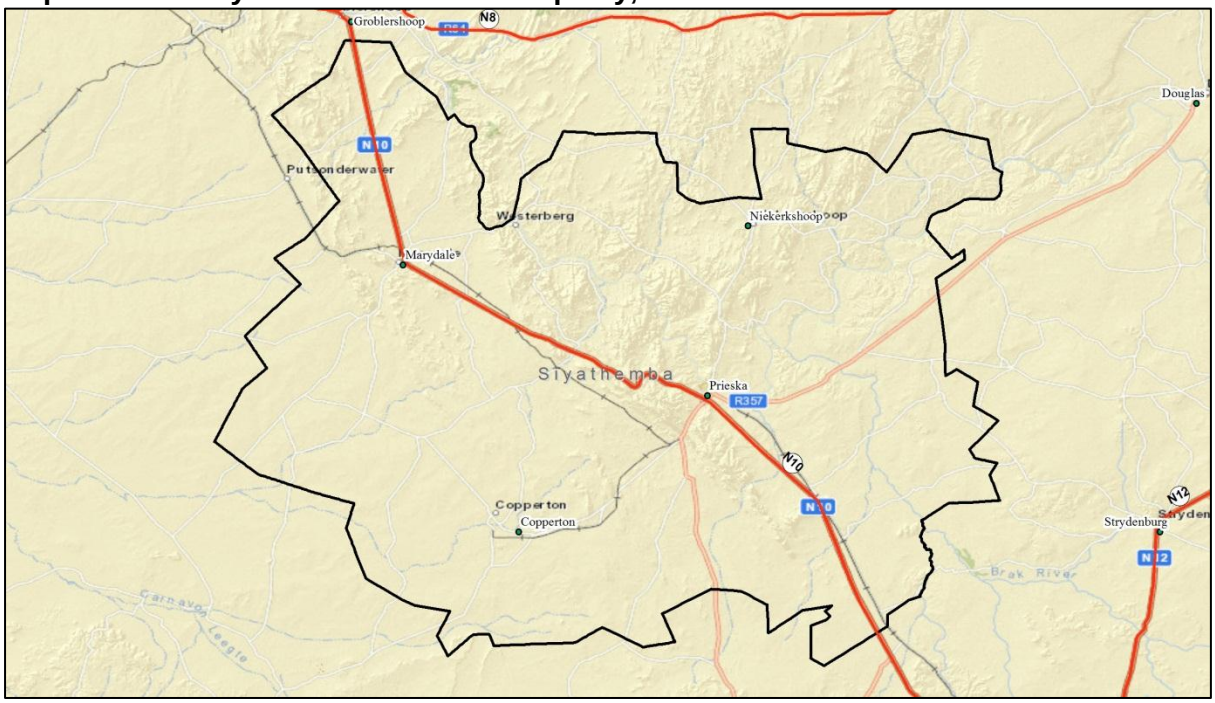
1.4. Geographic Context

1.4.1. Siyathemba in Local Context

Map 1.1 depicts the Siyathemba local municipal boundary. From this map it is evident that the municipal area includes the following main towns:

- Prieska (the seat of the Local Municipality)
- Marydale
- Niekerkshoop

Map 1.1 – The Siyathemba Local Municipality, 2012



Source: Boundary data provided by the Municipal Demarcation Board, 2012

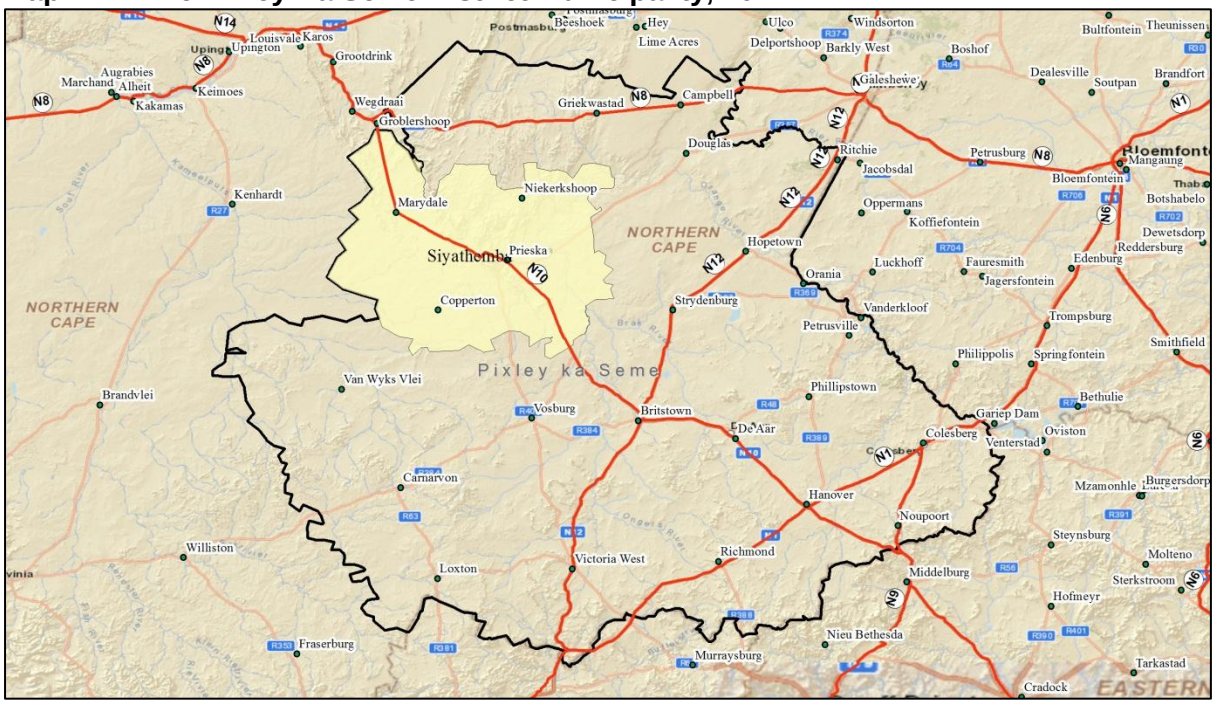
The municipal area encompasses a geographic area of some 8,197 km^2 which implies that Siyathemba accounts for some 8.0% of the total District surface area. The local economy is mainly agriculture based and highly dependent on the Orange River, which flows through the area.

1.4.2. Siyathemba in Regional Context

Siyathemba is one of eight Local Municipalities in the Pixley Ka Seme District. The other seven Municipalities are:

1. Thembelihle Local Municipality
2. Emthanjeni Local Municipality
3. Siyancuma Local Municipality
4. Umsobomvu Local Municipality
5. Ubuntu Local Municipality
6. Kareeberg Local Municipality
7. Renosterberg Local Municipality

Map 1.2 – The Pixley Ka Seme District Municipality, 2012



Source: Boundary data provided by the Municipal Demarcation Board, 2011

De Aar is the seat of the Pixley Ka Seme District Municipality (located in the Emthanjeni LM). Prieska is located some 182 km from De Aar and 236 km from Kimberley. Spatially, Siyathemba is very distant from South Africa's largest consumer markets. In this regard, the road transport distances illustrated by Table 1.1 would apply to LED initiatives.

Table 1.1 – Transport Distances from Siyathemba

City	Distance from Prieska (km)
Upington	249
De Aar	182
Kimberley	236
Bloemfontein	397
Cape Town	835
Johannesburg	714
Pretoria	775
Durban	1029

Section 2: Situational Analysis

The purpose of this Section is to describe the current reality of the area in the context of the larger region, Northern Cape and South Africa. The situational analysis forms the basis for the LED Strategy and sets the point of departure.

In order to plan for Local Economic Development, a good understanding of the economic base, markets and how the local economy functions is vital. The situational analysis investigates the economic and socio-economic trends of Siyathemba and provides base data to identify and prioritise important issues for consideration in the LED planning process. This facilitates an understanding of local resources, local businesses, what they produce, where businesses' inputs come from, the marketplace, etc.

2.1. Demographic Profile

The local population of an area and its socio-economic implications lie at the root of the need for LED planning and decision making by both government and the private sector. In the strategic planning process this information informs forecasting and scenario development towards potential future outcomes.

This sub-section intends to provide basic data on the local population in regional and national context. Population growth trends will be illustrated to enable the study team to plan for adverse situations, explore opportunities and to extrapolate the future. Local communities form an integral part of the local economy. They are the primary source of labour and entrepreneurship for economic growth and also the consumers of local products and services. It is thus vital to analyse demographic indicators to provide the proper context for socio-economic and economic realities as well as for strategic planning.

2.1.1. The Population

The local and regional population is illustrated by Table 2.1. From this Table, it is evident that Siyathemba had a local population of just more than 21,000 people during 2010.

Table 2.1 – The Local and Regional Population

Region	2004	2006	2008	2010
South Africa	46,745,940	47,827,370	48,911,245	49,991,472
Northern Cape	1,088,672	1,089,227	1,093,823	1,103,918
Pixley Ka Seme	190,396	185,334	180,082	179,507
Siyathemba Local Municipality	21,441	21,312	21,239	21,333

Source: Quantec Research, 2012

In regional context, this meant that Siyathemba contributed 11.9% to the District population (i.e. the second largest LM in the District by population) and 1.9% to the population of the Northern Cape.

Figure 2.1 – The Siyathemba Population Age & Gender Profile, 2000 & 2010

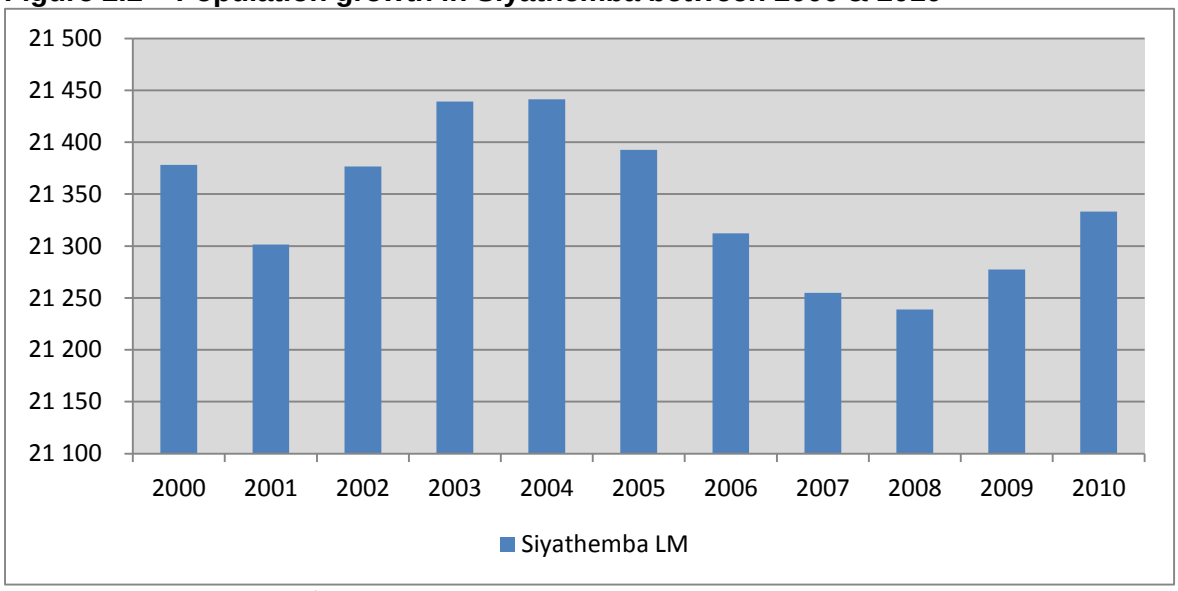
Source: Quantec Research, 2012

The Age & Gender Profile of the local population is illustrated by Figure 2.1. With regards to this profile, the following observations were made:

1. There were slightly more females (51.4%) than males (48.6%) among the local population during 2010. It was, however, noted that the population became slightly less female dominant since 2000 when 52.4% of the population were female.
2. The working age group (15 to 64) contributed 64.4% to the local population in 2010. This age group has increased proportionately (from 58.6% to 64.4%) in relation to the other age groups. Since 2000 this group increased by approximately 1,210 people.
3. The working age population is slightly male dominant. Since 2000, male working age population increased by around 928 men in absolute terms, while the number of women increased by about 282.
4. The age dependency ratio declined from 0.7 in 2000 to 0.6 dependents (children & the elderly) in 2010 for every working age adult.
5. Since 2000, the proportion of children under the age of 15 declined by 6.7%. This means that the age profile of the local population is becoming older. The number of children in the area also declined from around 14,700 during 2000 to just above 12,000 in 2010.

The population of Siyathemba declined from just over 21,370 people in 2000 to about 21,330 in 2010 (see Figure 2.2). This implies that the population contracted by 0.4% on average per annum. This growth rate is slightly lower in the Pixley Ka Seme DM, which contracted 0.7% p.a. The decline of the Siyathemba population was mainly driven by lower fertility rates.

Figure 2.2 – Population growth in Siyathemba between 2000 & 2010



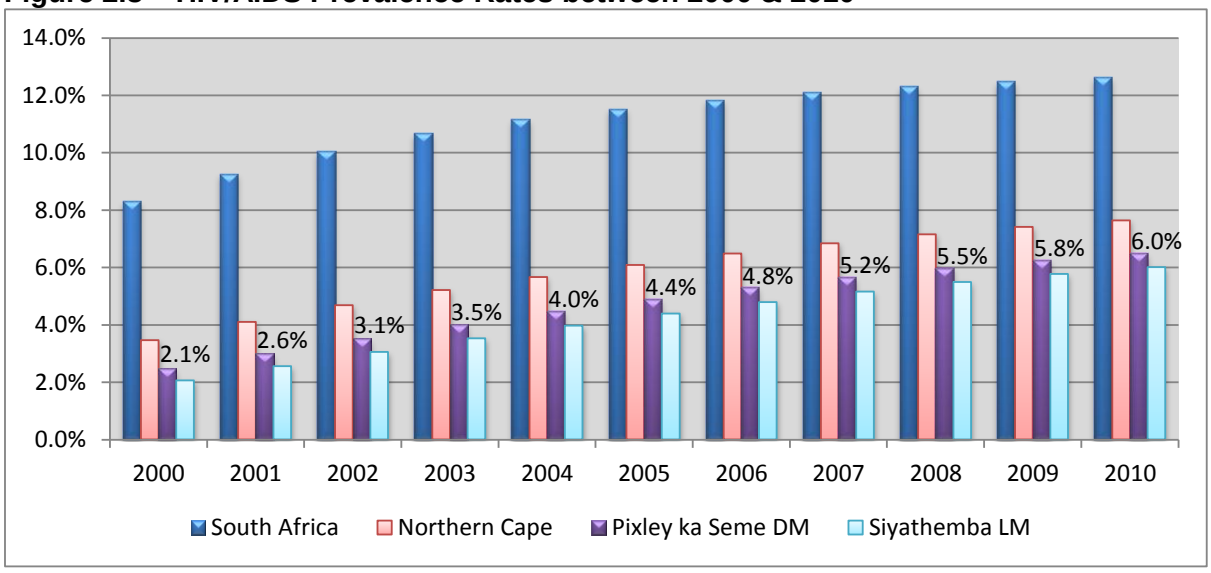
Source: Quantec Research, 2012

The death rate (i.e. the number of deaths per 1,000 people in year) experienced a relative increase from 11.2 deaths per 1,000 people in 1995 to 11.6 during 2010. During 2010, the death rate for Pixley Ka Seme was 11.9 deaths per 1,000 people, while it was 13 for the Northern Cape and 16.4 for the South African population. The reason for the lower death rate in the study area was mainly the result of lower HIV/AIDS prevalence rates when compared with South African averages.

2.1.2. HIV/AIDS Prevalence

The prevalence rate for HIV/AIDS in South Africa, the study area and the region is illustrated by Figure 2.3. During 2010, the HIV/AIDS prevalence rate of the Siyathemba population was 6.0% compared to the District rate of 6.5%. These rates compared well to the Northern Cape (7.6%) and South African (12.6%) averages in the same year.

Figure 2.3 – HIV/AIDS Prevalence Rates between 2000 & 2010



Source: Actuarial Society of South Africa, 2012

Since 2000, the number of people living with HIV/AIDS in the Siyathemba municipal area more than doubled from about 400 to just over 1,200 people in 2010. This means that while the local population compares well with South African averages (in terms of HIV/AIDS), the prevalence rate is expanding faster in Siyathemba (at 11.2% p.a.) when compared with South Africa (at 5.5% on average per annum since 2000).

2.2. Socio-Economic Profile

2.2.1. Adult Education

The levels of adult education (persons older than twenty years) in Siyathemba and the larger region are illustrated by Table 2.2. From this Table, it is evident that 14.2% of local adults did not complete any type of formal education whatsoever. This observation is relatively higher than the Provincial and National averages.

Table 2.2 – The levels of Adult Education in Siyathemba and the larger region, 2010

Level of Adult Education	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Grade 0/No schooling	10.8%	12.7%	18.6%	14.2%
Grade 1/Sub A	1.3%	1.3%	1.7%	1.2%
Grade 2/Sub B	1.9%	1.9%	2.5%	2.8%
Grade 3/Standard 1	2.5%	3.0%	3.7%	3.3%
Grade 4/Standard 2	3.1%	3.9%	4.0%	4.1%
Grade 5/Standard 3	3.3%	4.4%	5.4%	5.5%
Grade 6/Standard 4	4.2%	5.7%	5.4%	6.6%
Grade 7/Standard 5	5.7%	7.3%	7.6%	10.2%
Grade 8/Standard 6/Form 1	7.0%	8.7%	8.6%	10.9%
Grade 9/Standard 7/Form 2	6.4%	7.0%	6.5%	8.7%
Grade 10/Standard 8/Form 3/NTC1	9.2%	9.8%	8.1%	8.3%
Grade 11/Standard 9/Form 4/NTC11	12.1%	7.2%	5.9%	6.0%
Grade 12/Standard 10/Form 5/Matric/NTC111	19.8%	17.4%	13.4%	9.3%
Less than matric & certif/dip	2.8%	2.3%	2.4%	4.0%
Certificate with Grade 12	2.0%	1.9%	1.7%	0.8%
Diploma with Grade 12	3.3%	2.5%	2.2%	1.8%
Bachelor's Degree	2.2%	1.2%	0.9%	0.5%
Bachelor's Degree and Diploma	1.0%	0.7%	0.9%	1.6%
Honours degree	0.9%	0.6%	0.3%	0.2%
Higher Degree (Master's, Doctorate)	0.7%	0.4%	0.3%	0.1%
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**

Source: Quantec Research, 2012

Adults who live within the Siyathemba municipal area do not compare well with the average for the Northern Cape in terms of adults who obtained a matric certificate. In Siyathemba, around 14% of adults have a matric certificate compared to 19.7% of adults in Pixley Ka Seme and 24.7% in the Northern Cape. In terms of the proportion of adults who obtained a tertiary qualification, Siyathemba (5.1%) was also relatively lower that the District (6.3%) and Northern Cape (7.3%).

The adult education profile of Siyathemba did not improve over the past ten years. Since 2000, the number of adults with a matric certificate decreased from about 1,845 (or 15.3% of the adult population) to around 1,820 in 2010 (i.e. an average decrease of 0.1% per annum). It was also noted that the portion of adults with a tertiary qualification had increased from about 530 in 2000 to around 640 in 2010.

2.2.2. Poverty & Social Needs

2.2.2.1. Household Access to Services

A total of around 5,500 household dwellings were estimated to exist in the Siyathemba municipal area during 2010. This accounted for some 11.7% of all household dwellings in the District, which ranked Siyathemba fourth among Pixley Ka Seme's Local Municipalities. Since 2000, the number of dwellings increased by 0.8% on average per annum compared to 0.1% decline in the District and 0.5% growth in the Province.

Table 2.3 – Household Access to Services, 2000 & 2010

Household Indicator	2000	2010	Access	Growth
House or brick structure	4,303	4,419	81.8%	0.3%
Electricity	4,305	4,812	87.3%	1.1%
Piped Water	5,001	5,356	97.5%	0.7%
Refuse removal	4,066	4,546	83.5%	1.1%
Flush or chemical toilet	3,597	4,323	78.6%	1.9%

Source: Quantec Research, 2012

Table 2.3 illustrates the type of dwellings found in Siyathemba and the level of household access to municipal services. In this regard, the following observations were made:

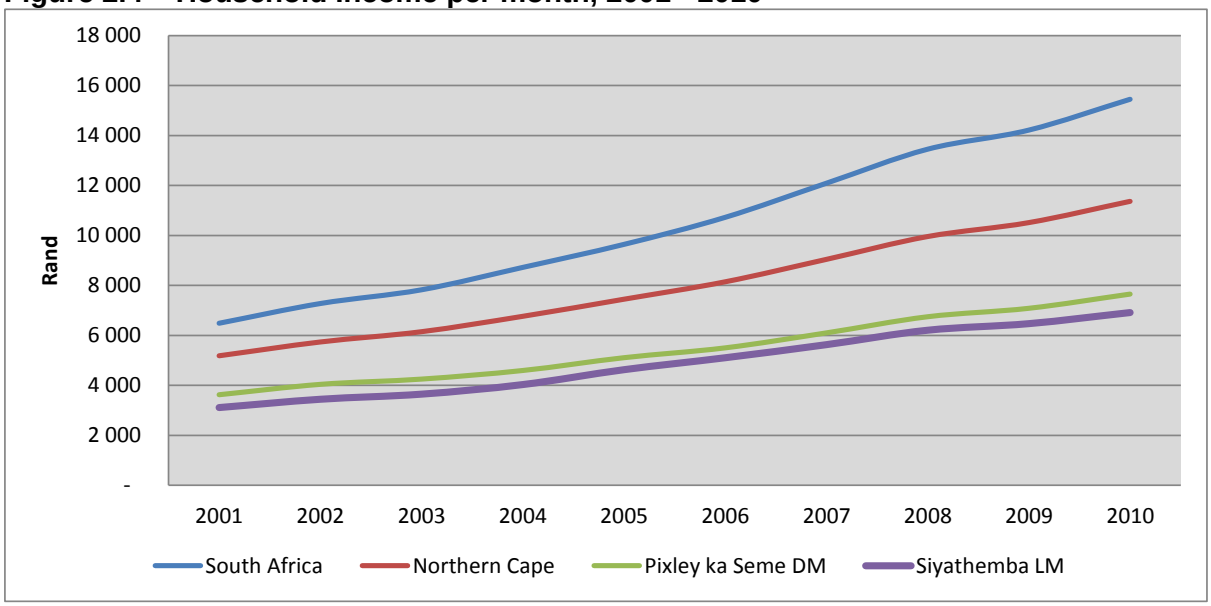
1. More than 81% of household dwellings found in Siyathemba can be classified as houses or brick structures on separate stands. This indicator is slightly higher when compared with the average for Pixley Ka Seme (80.1%) and the Northern Cape (77.4%). Some 8.6% of local dwellings can be described as shacks.
2. Around 87% of household dwellings found in Siyathemba have access to electricity. This indicator is on par with the District and Provincial average.
3. Around 97% of household dwellings found in Siyathemba have access to piped water while the remainder mostly rely on boreholes as a source. The area rated on par in terms of this indicator when compared with Pixley Ka Seme (96.8%) and the Northern Cape (96.2%).
4. Around 83% of local households enjoyed a weekly refuse removal service by the Local Municipality, compared to 76.2% in Pixley Ka Seme and 68.8% in the Northern Cape.
5. Approximately 78.6% of local households have access to flush or chemical toilets. This indicator is relatively higher when compared with the District (67.8%) and Provincial (67.8%) average. Those households that do not have access to flush or chemical toilets, mainly make use of pit latrines as their main source of sanitation.

2.2.2.2. Household Income & Expenditure

Trends in the level of monthly household income are portrayed by Figure 2.4. From this Figure, it is evident that households in Siyathemba experience lower levels of income (on average) when compared with the other regions illustrated in Figure 2.4. During 2010, the average monthly income per household was R6,912 in Siyathemba, relatively lower than the District average of R7,652.

Since 2001, household income has grown by 9.3% on average p.a. in Siyathemba compared to 8.7% in Pixley Ka Seme and 9.1% in the Northern Cape. This means that there is a growing welfare gap between households in Siyathemba and the larger region. Income from sources other than labour remuneration has also been increasing. Such non-remuneration income mostly includes social grants and other forms of transfers. Over the past nine years the monthly non-remuneration income contribution (per household) increased from R994 in 2001 to R1,627 in 2010 (i.e. by 5.6% p.a.). This means that local communities are becoming more dependent on social grants (and other transfers).

Figure 2.4 – Household Income per month, 2001 - 2010



Source: Quantec Research, 2012

From a community development perspective, one should also consider the distribution of income among local households to reflect the gaps between local income levels. A simple average (as indicated by Figure 2.4) may provide a skewed picture of reality if there are a few households that receive incomes that are substantially higher (or lower) than others in an area. From Table 2.4 it is evident that the distribution of income among local households is indeed highly skewed. Around 65% of local households earn less than R3,200 per month and are regarded as poor. In comparison, some 67.8% of households in Pixley Ka Seme and 63.8% in the Northern Cape fall in this category. The largest income group (representing 29.0% of local households) in Siyathemba are households who earn between R1,600 and R3,200 per month. On the other side of the income scale, it can be observed that households who earn more than R12,800 per month only represent 8.0% of households in Siyathemba compared to 7.7% in the District and 9.9% in the Province.

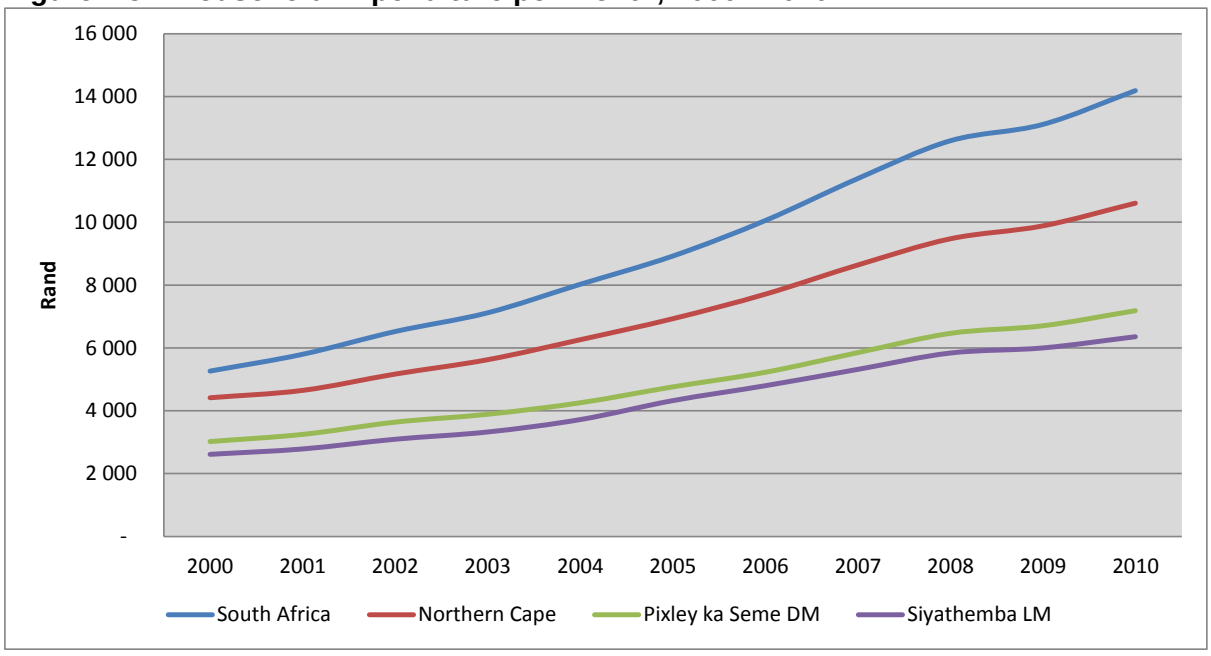
Table 2.4 – Household Income Distribution, 2007

Monthly Income	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
R1 - R400	6.2%	4.4%	4.7%	4.1%
R401 - R800	11.1%	9.8%	9.1%	8.3%
R801 - R1 600	23.5%	25.1%	26.8%	23.5%
R1 601 - R3 200	23.7%	24.5%	27.1%	29.0%
R3 201 - R6 400	14.2%	16.4%	16.2%	18.6%
R6 401 - R12 800	9.4%	10.0%	8.3%	8.4%
R12 801 - R25 600	6.6%	5.8%	4.7%	4.4%
R25 601 - R51 200	3.5%	2.8%	1.7%	2.5%
R51 201 - R102 400	1.2%	0.7%	0.4%	0.0%
R102 401 - R204 800	0.4%	0.3%	0.7%	0.9%
R204 801 or more	0.3%	0.3%	0.2%	0.2%

Source: Statistics South Africa – Community Survey, 2007

Trends in the level of monthly household expenditure are portrayed by Figure 2.5. From this Figure, it is evident that households in Siyathemba have experienced increases in expenditure levels (9.3% on average p.a.) over the past decade in comparison with Pixley Ka Seme (9.0%) and the Northern Cape (9.2%).

Figure 2.5 – Household Expenditure per month, 2000 - 2010



Source: Quantec Research, 2012

Table 2.5 illustrates the distribution in household consumption expenditure in the study area and the larger region. From this Table, it is evident that households in all the areas under observation spend most of their disposable income on food, beverages and tobacco. This is especially true with regards to households in Siyathemba, which spend around 26% of their income on this product group. In comparison, local households spend slightly less (7.2%) on durable goods, such as furniture and personal transport equipment in line with the Northern Cape (7.2%).

Table 2.5 – Household Consumption Expenditure, 2010

Household Expenditure Item	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Furniture, household appliances, etc.	1.6%	1.3%	1.1%	1.1%
Personal transport equipment	4.2%	3.8%	3.7%	3.7%
Recreational and entertainment goods	1.4%	1.6%	1.7%	1.8%
Other durable goods	0.7%	0.6%	0.6%	0.6%
Clothing and footwear	5.2%	4.3%	4.0%	4.1%
Household textiles, furnishings, glassware, etc.	1.4%	1.2%	1.0%	1.0%
Motor car tyres, parts and accessories	1.4%	1.2%	1.2%	1.2%
Recreational and entertainment goods	0.8%	0.9%	0.9%	1.0%
Miscellaneous goods	0.5%	0.6%	0.6%	0.6%
Food, beverages and tobacco	26.4%	27.3%	26.5%	26.0%
Household fuel and power	3.5%	3.0%	3.1%	3.0%
Household consumer goods	4.0%	3.9%	3.8%	3.7%
Medical and pharmaceutical products	1.8%	1.8%	1.9%	2.0%
Petroleum products	3.5%	3.2%	3.0%	3.1%
Recreational and entertainment goods	0.8%	0.7%	0.8%	0.8%
Rent	12.3%	14.7%	15.2%	14.6%
Household services, including domestic servants	2.7%	2.7%	2.8%	2.8%
Medical services	6.1%	6.0%	6.3%	6.5%
Transport and communication services	8.9%	8.9%	9.1%	9.1%
Recreational, entertainment and educational services	4.3%	3.9%	3.9%	4.0%
Miscellaneous services	8.8%	8.5%	8.7%	9.3%
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**

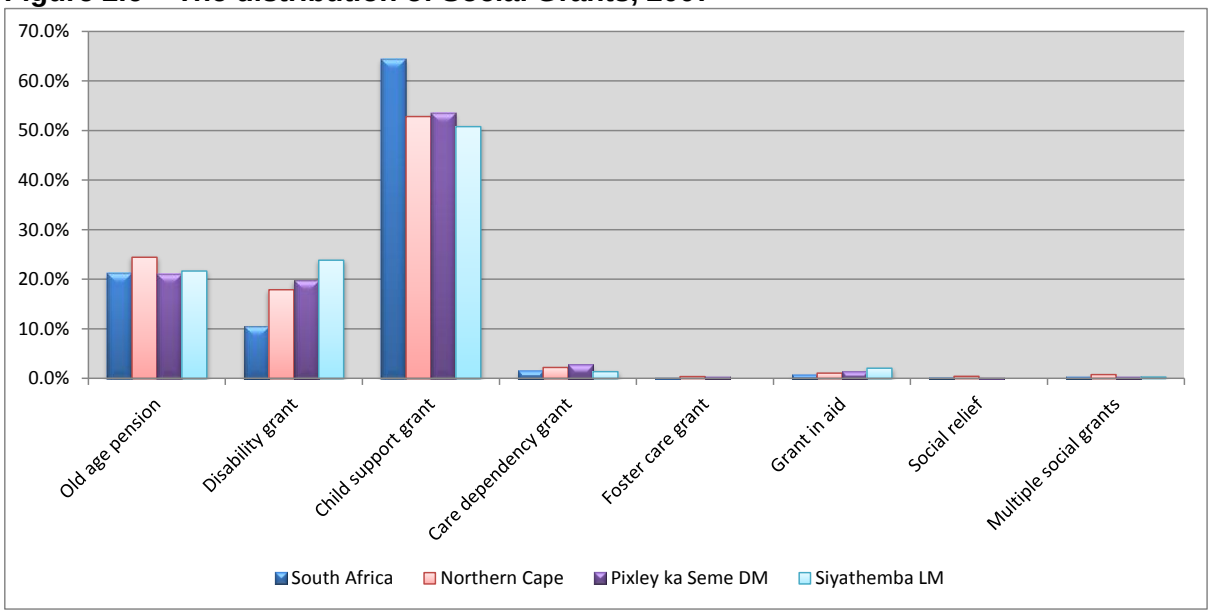
Source: Quantec Research, 2012

Other observations in this regard reveal that households in Siyathemba typically spend less on entertainment, medical services & pharmaceutical products and transport. Although this expenditure profile would also be skewed in relation to the income profile, it does reveal that local communities spend a larger part of their income on “necessary” items rather than “luxury” items.

2.2.2.3. Access to Social Grants

During 2007, some 5,200 people in Siyathemba received social grants, which accounted for 11.9% of such grants in the District. The most popular grant received by dependents in all four regions under observation was the child support grant. In Siyathemba around 2,600 people received this grant during 2007. In fact, the child support grant made up 50.8% of all social grants received in Siyathemba, slightly lower that Pixley Ka Seme, Northern Cape and South African during 2007.

Figure 2.6 – The distribution of Social Grants, 2007



Source: Statistics South Africa – Community Survey, 2007

The second most popular social grant received by dependents in all four regions was disability, followed by old age pensions grants. In Siyathemba, some 1,200 people received a disability grant, while about 1,400 received an old age pension grant during 2007.

2.2.3. Crime

During 2010, nearly 839 crimes were reported at police stations in the Siyathemba municipal area. Since 2005, the total number of reported crimes has increased by 0.2% on average per annum. Table 2.6 presents the distribution of crimes reported at local police stations during 2010.

In Siyathemba, the most crimes were reported at the Prieska (595 reported incidents) police station during 2010, followed by Marydale (158 reported incidents). In this regard, the following observations were made:

- **Prieska** – The most common type of reported incidence here during 2010 was *assault with the intent to inflict grievous bodily harm,* followed by *theft.* The number of crimes reported at the local police station increased from 574 in 2009 to 595 in 2010. The fastest growing crime type is currently *assault with the intent to inflict grievous bodily harm.*
- **Niekerkshoop –** The most frequently reported incidence during 2010 was *stock theft,* followed by *assault with the intent to inflict grievous bodily harm.* The number of crimes reported at the local police station decreased from 119 in 2009 to 86 in 2010. The fastest growing crime type is currently *stock theft.*
- **Marydale –** During 2010, the crime most often reported was *assault with the intent to inflict grievous bodily harm,* followed by *common assault.* The number of crimes reported at the local police station increased from 129 in 2009 to 158 2010. The fastest growing crime type is currently *drug related crime.*

Table 2.6 – Incidence of Crime reported at local Police Stations, 2010

Type of Crime	Marydale	Niekerkshoop	Prieska
Assault with the intent to inflict grievous bodily harm	39	13	178
All theft not mentioned elsewhere	14	11	76
Common assault	22	1	60
Stock-theft	10	26	34
Drug-related crime	24	10	26
Malicious damage to property	6	3	39
Burglary at residential premises	6	11	28
Total Sexual Crimes	13	1	27
Burglary at non-residential premises	3	3	29
Commercial crime	2	2	15
Shoplifting	0	0	18
Attempted murder	4	0	11
Crimen injuria	8	1	5
Murder	0	1	11
Driving under the influence of alcohol or drugs	2	0	9
Theft out of or from motor vehicle	1	2	7
Common robbery	0	1	6
Aggravated robbery	0	0	6
Arson	1	0	4
Culpable homicide	1	0	2
Theft of motor vehicle and motorcycle	0	0	2
Public violence	0	0	2
Neglect and ill-treatment of children	2	0	0
Illegal possession of firearms and ammunition	0	0	0
Kidnapping	0	0	0
Total	**158**	**86**	**595**

Source: The South African Police Service, 2012

Overall, the type of crime most frequently occurring (as per reported incidences) during 2010 in Siyathemba was *assault with the intent to inflict grievous bodily harm* (230 reported incidents), followed by *theft* (76 reported incidents).

2.3. Economic Profile

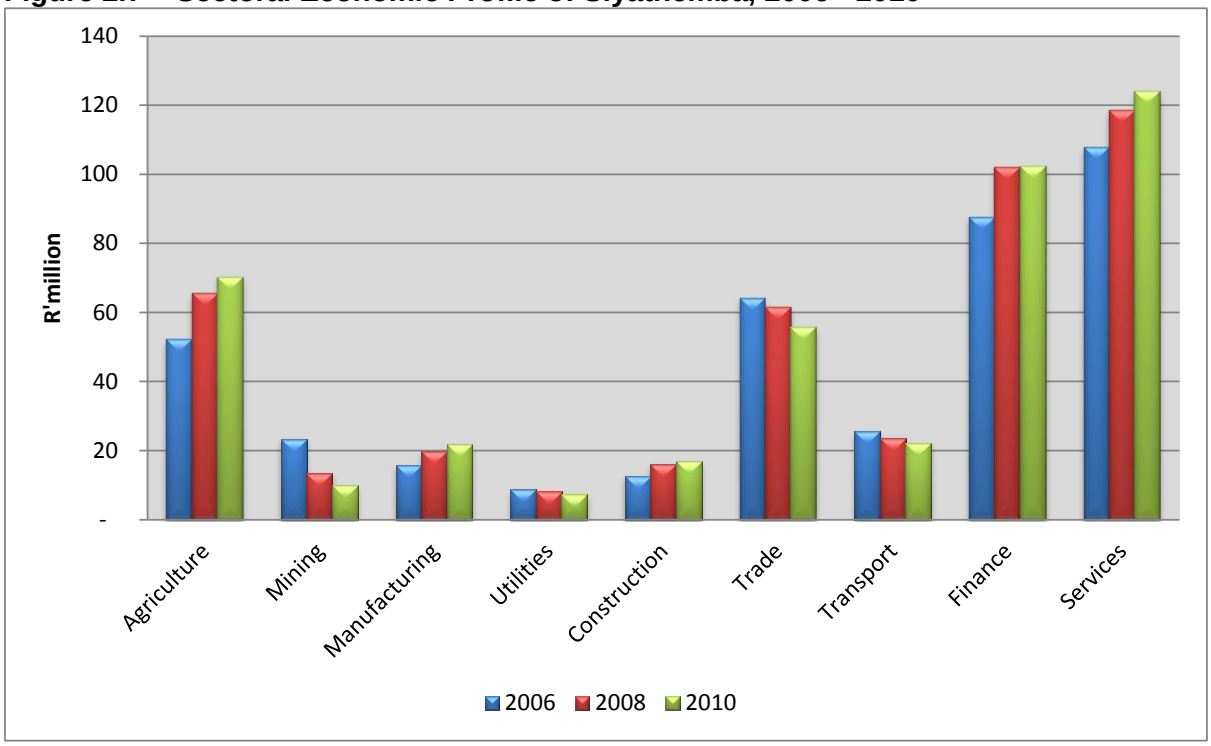
The following sub-section provides an analysis of the local economy in the context of the National, Provincial, and District environment.

2.3.1. Economic Production & Growth

Gross Domestic Product (GDP) is defined as the market value of all final goods and services produced within an area in a given period of time. The size of an economy is usually measured by its Gross Domestic Product. This value is equal to the economic wealth of the area; all the things of economic value that can be bought or sold that have been produced in the area in one year.

The Sectoral GDP Profile of Siyathemba is illustrated by Figure 2.7. From this profile, it is evident that the economy is highly unbalanced and dominated by the Government Services sector, which contributed R124 million (or 28.9%) to the local economy in 2010. This sector was followed by the Financial Services (23.8%) and Agriculture sectors (16.4%). The rest of the sectors illustrated in Figure 2.7 all contributed around 31% to the local economy.

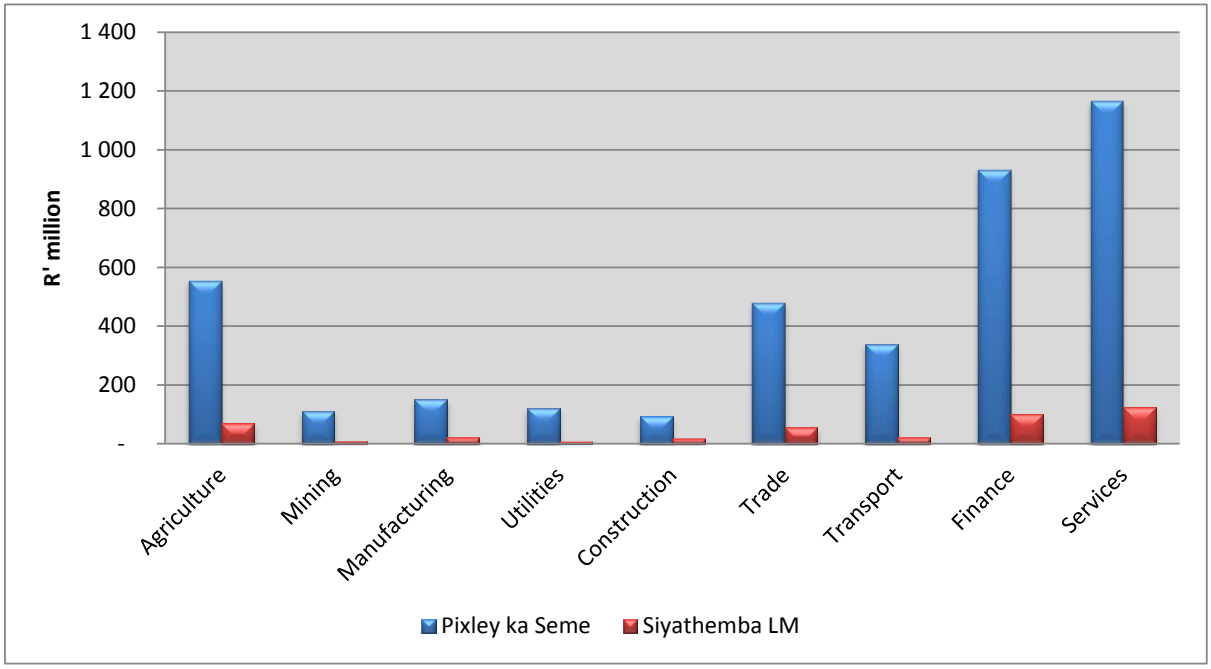
Figure 2.7 – Sectoral Economic Profile of Siyathemba, 2006 - 2010



Source: Quantec Research, 2012

Since 2006, the local economy grew by 2.0% on average per annum. The fastest growing sectors during this period were Manufacturing (8.3%) and Agriculture (7.7%).

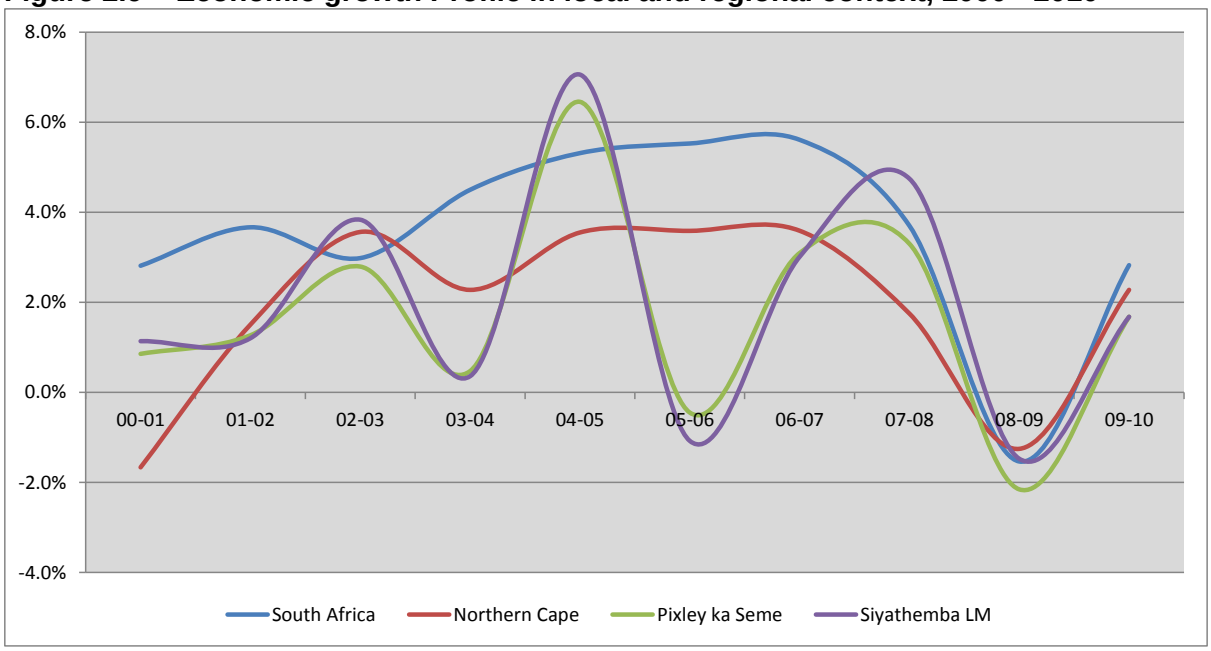
Figure 2.8 – Sectoral Economic Profile of Siyathemba compared to Pixley Ka Seme, 2010



Source: Quantec Research, 2012

The local economy in District context is illustrated by Figure 2.8. From this profile, it is evident that the Construction sector of Siyathemba makes a significant contribution to that of Pixley Ka Seme (some 18.0% in 2010). Overall, the local economy contributed 10.9% to the District economy during 2010.

Figure 2.9 – Economic growth Profile in local and regional context, 2000 - 2010



Source: Quantec Research, 2012

The local economy grew by 1.7% during 2009/10 compared to the District (1.7%), Provincial (2.3%) and National (2.8%) growth rates (see Figure 2.9). From 2000 to 2010. an average

growth rate of 2.0% can be observed in Siyathemba, which was inadequate to create sufficient jobs in the local economy to reduce the unemployment rate. Local economic growth is not strongly linked with that of the District, which reflects a local economy that is highly concentrated (in Agriculture) with a less balanced profile when compared with the larger region. This implies that the local economy is more vulnerable to market fluctuations (especially in terms of fluctuations that have an impact on regional agriculture).

Table 2.7 illustrates the ten year average annual economic growth rates (2000 to 2010) in Siyathemba and the larger region. From this Table is evident that growth in the local economy was mainly driven by Manufacturing (10.2% p.a.), Construction (6.6%) and Finance (5.6% p.a.). The other sectors in the local economy contracted over the past ten years (most notably in the Mining, Utilities and Transport).

Table 2.7 – Average Annual Economic Growth by Sector, 2000 - 2010

Sector	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Agriculture	1.7%	3.0%	2.0%	4.6%
Mining	0.1%	-1.3%	-5.0%	-13.0%
Manufacturing	2.3%	2.6%	3.9%	10.2%
Utilities	1.8%	-0.5%	-0.7%	-2.8%
Construction	8.3%	5.4%	2.8%	6.6%
Trade	3.1%	2.5%	-0.2%	-0.9%
Transport	5.0%	4.1%	-1.3%	-2.9%
Finance	5.9%	4.3%	6.6%	5.6%
Services	2.8%	2.9%	1.3%	3.1%
Total	**3.5%**	**1.9%**	**1.7%**	**2.0%**

Source: Quantec Research, 2012

When compared to the larger region, it can be observed that local growth in the Finance sector (5.6% p.a.) is relatively in line with the District (6.2% p.a.), indicating a strong growth correlation and the importance of Siyathemba to Pixley Ka Seme in terms of its contribution to District Financial Services.

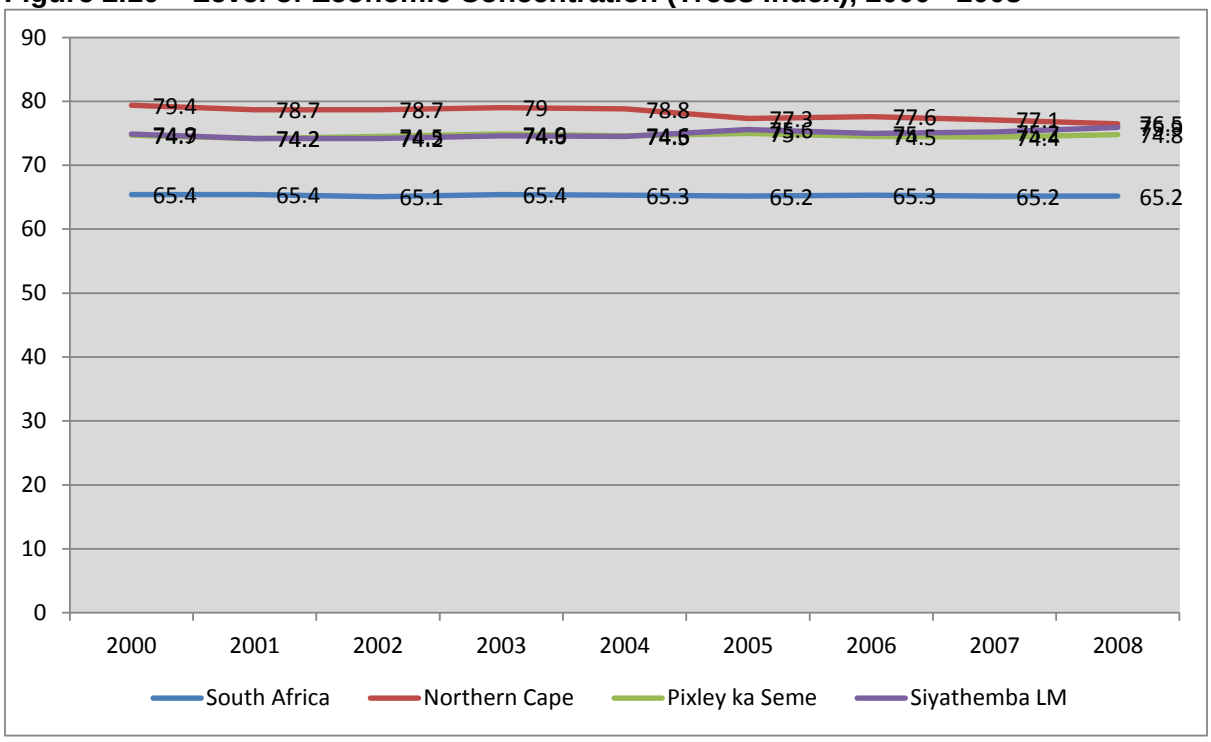
2.3.2. The Character of the Local Economy

Figure 2.10 illustrates the level of economic concentration in Siyathemba and compares it with the larger region. The level of diversification or concentration of a region's economy is measured by a tress index. A tress index of zero represents a totally diversified economy. On the other hand, the higher the index (closer to 100), the more concentrated or vulnerable the region's economy to exogenous variables, such as adverse climatic conditions, commodity price fluctuations, etc.

It is evident that the level of concentration in Siyathemba is very high (75.9) when compared with the larger region (especially with the South African average of 65.2). Since 2000, the tress index in the local economy increased from 74.9, while the Provincial and National economies became more diversified. This implies that the local economy is becoming increasingly vulnerable to exogenous conditions, such as market fluctuations and especially variables that have a direct impact on agriculture. It is thus of central importance that LED role players endeavour in their development efforts towards the diversification of the economy.

A location quotient compares the local share of economic activity in a particular industry to the regional share of economic activity in the same industry. The result reveals the degree of local specialisation in each industry. If the location quotient for a particular industry is between zero and one, the study area is less specialised than the region, while location quotients greater than one reveal greater specialisation of the industry in the local economy than in the regional economy. Also, observing location quotients over time show if an industry is becoming more or less specialised in an area.

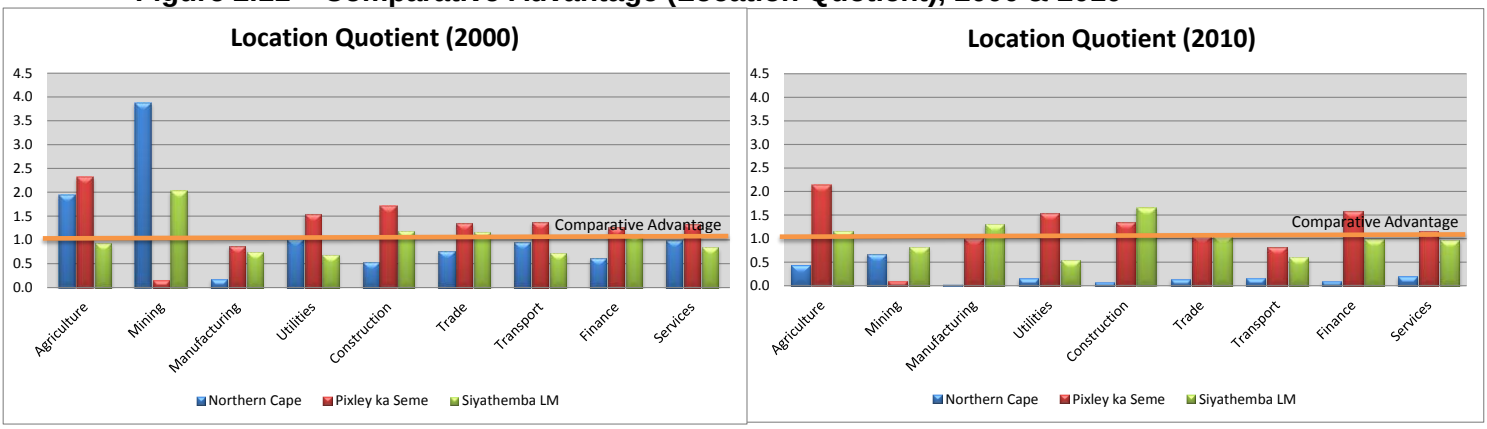
Figure 2.10 – Level of Economic Concentration (Tress Index), 2000 - 2008



Source: Quantec Research, 2012

The location quotient for Siyathemba, Pixley Ka Seme, the Northern Cape and South Africa is compared in Figure 2.11. From the 2010 profile it is evident that Siyathemba's economy has a comparative advantage in Construction, Manufacturing, and Agriculture. In fact, the location quotient for the Agriculture sector in Siyathemba improved from 0.9 in 2000 to 1.2 during 2010.

Figure 2.11 – Comparative Advantage (Location Quotient), 2000 & 2010



Source: Quantec Research, 2012

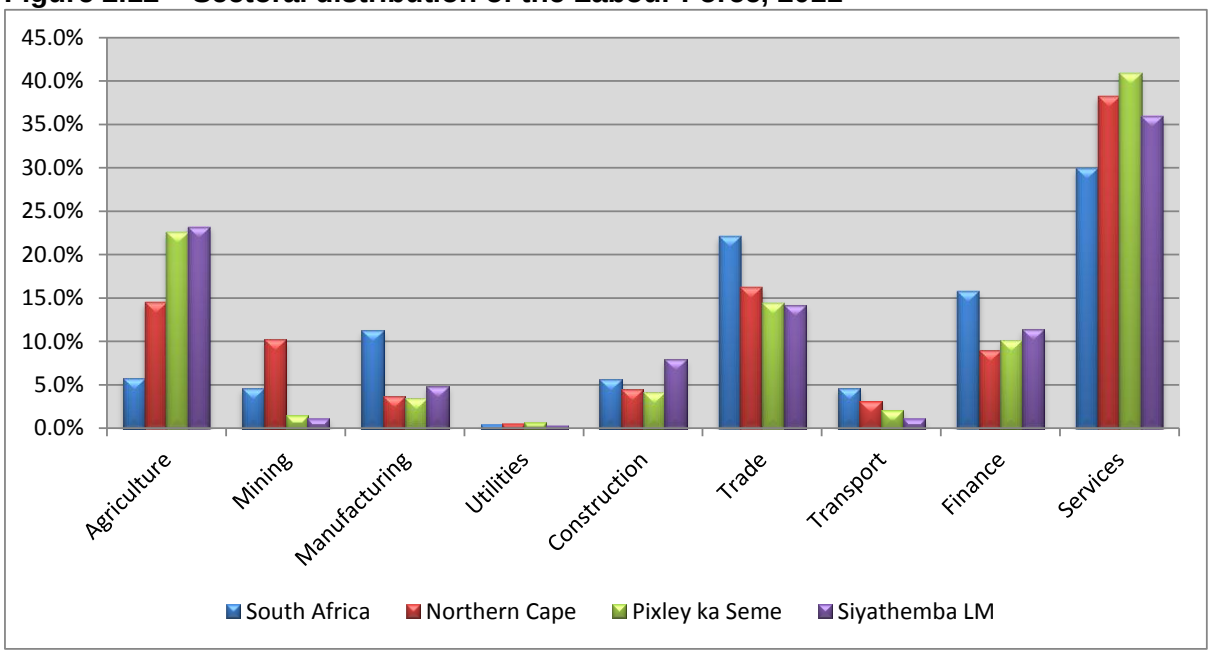
It is also noted that Pixley Ka Seme enjoys a comparative advantage with regards to Utilities, while Siyathemba does not. In fact, Siyathemba's location quotient for Utilities declined since 2000, while that of Pixley Ka Seme has been constant. It would thus be of key importance in the next section of this report (i.e. the Development Potential Analysis) to explore the reasons for this phenomenon in order to identify strategies that would allow local industries to benefit from this regional development trend.

2.4. Labour Profile

2.4.1. Overview

The 2010 sectoral distribution of the labour force in South Africa, the Northern Cape, Pixley Ka Seme and Siyathemba is illustrated by Figure 2.12. From this profile, it is evident that most workers in Siyathemba are employed in the Government Services sector (around 1,700 workers), followed by Agriculture (about 1,100 workers) and the Trade (about 670 workers) sectors.

Figure 2.12 – Sectoral distribution of the Labour Force, 2011

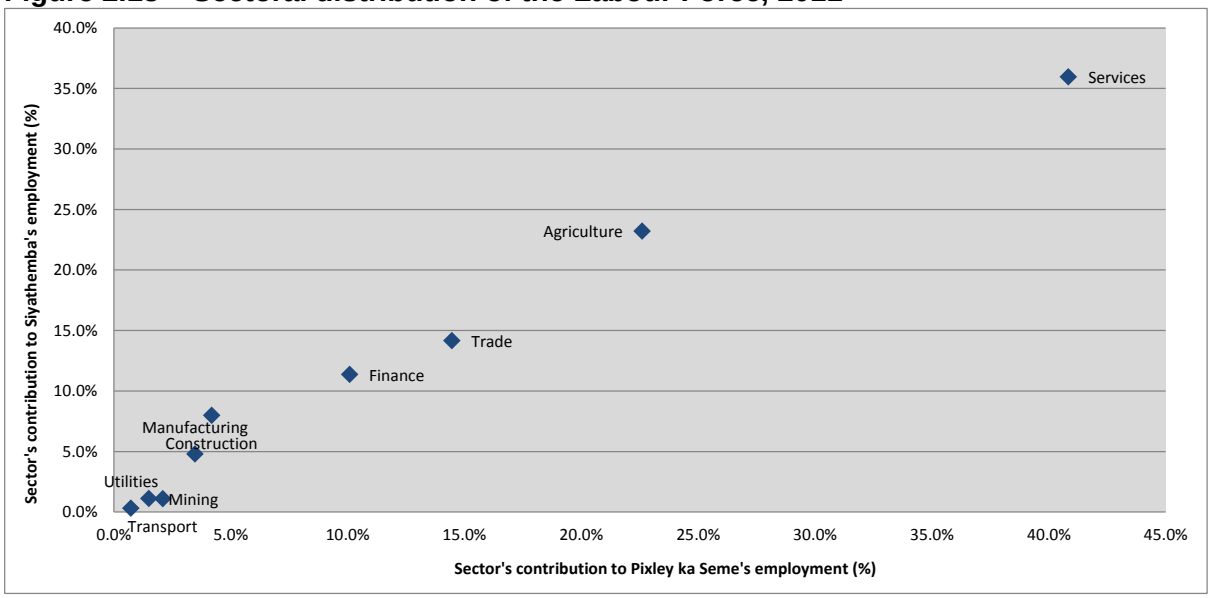


Source: Quantec Research, 2012

Figure 2.13 provides a closer comparison between the sectoral labour profiles of Pixley Ka Seme and Siyathemba. When compared to the District, it can be observed that the labour force of Siyathemba is highly concentrated in the Services sector, while the other regions under observation have a more balanced labour distribution.

Local and regional trends in total employment are depicted by Figure 2.14. From this Figure, it is clear that total employment in Siyathemba has been in fluctuating over the last ten years. Moreover, employment in the study area declined marginally from some 4,800 jobs during 2000 to just below 4,700 in 2010. Over a ten-year period, this could be translated to an average annual decline of 0.2%. Over the same period, employment in Pixley Ka Seme declined by 1.3% on average per annum, while that of the Northern Cape and South Africa increased by 0.9% and 0.5% respectively.

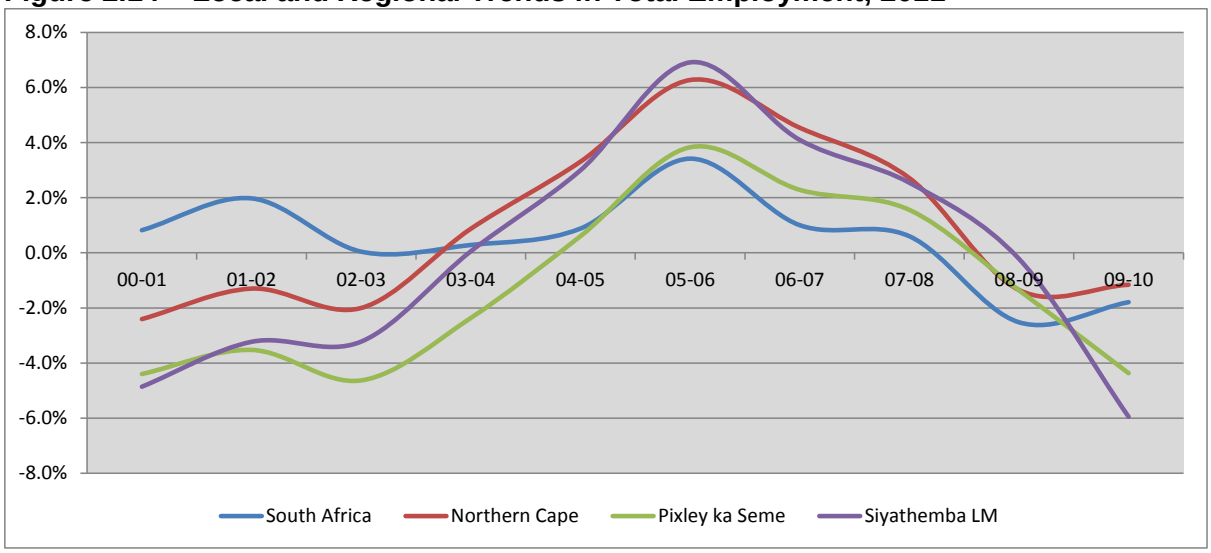
Figure 2.13 – Sectoral distribution of the Labour Force, 2011



Source: Quantec Research, 2012

It is also observed that local employment trends are not well-integrated with that of the larger region, which could be attributed to the concentrated nature (in the Agriculture sector) of the local economy. In contrast, employment trends in Pixley Ka Seme, the Northern Cape and South Africa follow growth profiles that are better correlated due to higher levels of diversity in these economies. The threat presented by employment vulnerability and its socio-economic implications for local communities in Siyathemba cannot be emphasised enough.

Figure 2.14 – Local and Regional Trends in Total Employment, 2011



Source: Quantec Research, 2012

Employment growth is broken down by sector in Table 2.8. From this Table, it is evident that employment in the Mining sector (-7.9% p.a.) has been in steep decline over the past decade, followed by Transport (-5.3%) and Agriculture (-4.9%).

Table 2.8 – Average Annual Employment Growth by Sector, 2000 - 2010

Sector	South Africa	Northern Cape	Pixley Ka Seme DM	Siyathemba LM
Agriculture	-7.3%	-5.5%	-6.2%	-4.9%
Mining	2.8%	3.9%	0.5%	-7.9%
Manufacturing	-1.2%	-3.2%	-2.4%	4.1%
Utilities	1.1%	2.5%	1.8%	-2.0%
Construction	0.1%	-0.3%	-3.4%	1.5%
Trade	1.1%	2.2%	-0.5%	-1.2%
Transport	2.1%	3.1%	-2.1%	-5.3%
Finance	2.6%	5.3%	7.6%	6.6%
Services	1.6%	3.1%	1.4%	3.2%
Total	**0.5%**	**0.9%**	**-1.3%**	**-0.2%**

Source: Quantec Research, 2012

When these employment trends are compared with those observed for GDP (see Table 2.7), it is noted that total employment declined over the past decade (by 2.5% p.a.) while the economy grew by 2.0% per annum in GDP terms. This phenomenon is referred to as "jobless growth" which implies that local economy is becoming less labour intensive and more capital intensive.

2.4.2. Characteristics of the Labour Force

Key labour and employment indicators are presented by Table 2.9 below for Siyathemba and the larger region.

Table 2.9 – Regional Employment Indicators, 2000 & 2009

Labour Indicators	South Africa		Northern Cape		Pixley Ka Seme DM		Siyathemba LM	
	2000	2009	2000	2009	2000	2009	2000	2009
Labour force ('000)	11,502	12,261	245	272	44	41	5	5
Unemployment rate (%)	30.2	25.1	27.0	27.6	27.7	33.0	26.8	34.7
Labour force participation rate (%)	61.1	52.0	52.5	53.3	54.0	53.6	53.2	57.4
Highly Skilled Workers	12.3%	12.7%	10.7%	11.7%	9.4%	10.9%	9.3%	10.4%
Skilled Workers	39.3%	42.7%	35.4%	39.7%	34.3%	38.6%	34.9%	37.8%
Semi- and unskilled workers	48.4%	44.5%	53.8%	48.6%	56.3%	50.6%	55.8%	51.8%

Source: Quantec Research, 2012

From this Table, the following observations were made:

- While the number of jobs increased in South Africa, as well as the Northern Cape and Pixley Ka Seme between 2000 and 2009, it declined in Siyathemba.
- During 2009, the unemployment rate for Siyathemba was estimated at some 34.7% which was slightly higher than the District average. The unemployment rate has steadily increased in Siyathemba over the past decade.
- The labour force participation rate indicates the portion of working-age adults who are employed and those actively seeking employment. Since 2000 the portion of such adults increased from 53.2% to 57.4%.

- Compared to the other regions under observation, a small portion of workers (10.3%) in Siyathemba can be classified as highly skilled. In fact, more than 52% of workers can be regarded as semi- or unskilled workers.

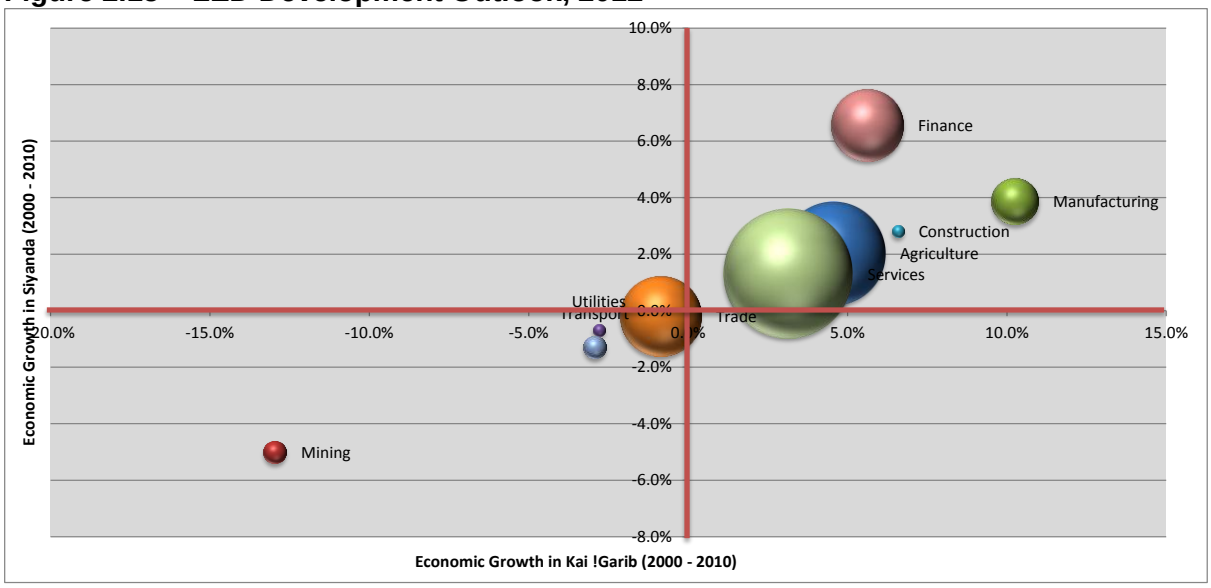
2.5. Inferences for development

Based on the discussion and data presented in this Section, the following inferences for development can be drawn:

1. During 2010, Siyathemba had a population of just over 21,000 people which made up 11.9% of the District Population and 1.9% of the Provincial Population. The local population total contracted by 0.01% per annum over the last decade. This implies lower fertility rates and that more people are leaving the area when compared to regional averages. The average age of the local population is also becoming older.
2. In Siyathemba, around 14% of adults have a matric certificate compared to 19.7% of adults in Pixley Ka Seme and 24.7% in the Northern Cape. Since 2000, the number of adults with a matric certificate decreased.
3. A total of almost 5,600 household dwellings were estimated in the Siyathemba municipal area during 2010. This accounted for some 11.7% of all household dwellings in the District, which ranked Siyathemba fourth among Pixley Ka Seme's Local Municipalities. All local households are well serviced in their access to municipal services (i.e. piped water, electricity and brick housing).
4. Households in Siyathemba experience lower levels of income (on average) when compared with the District and the Province. During 2010 the average monthly income per household was R6,912 in Siyathemba compared with the District average of R7,652. Since 2001, household income has grown by 9.3% on average p.a. in Siyathemba compared to 8.7% in Pixley Ka Seme and 9.1% in the Northern Cape. This means that there is a growing welfare gap between households in Siyathemba and the larger region.
5. Local households spend most of their income (almost 30%) on food, beverages and tobacco.
6. During 2010, some 830 crimes were reported at police stations in the Siyathemba municipal area. Since 2005, the total number of reported crimes has increased by 0.2% on average per annum. Overall, the most common type of crime during 2010 in Siyathemba was assault with the intent to inflict grievous bodily harm (230 reported incidents) followed by theft (101 reported incidents).
7. The economy of Siyathemba is highly unbalanced and dominated by the Government Services sector, which contributed R124 million (or 28.9%) to the local economy in 2010. This sector was followed by the Finance (23.8%) and Agriculture sectors (16.4%).
8. Since 2006 the local economy grew by 2.0% on average per annum. The fastest growing sectors during this period were Manufacturing (10.2%), Construction (6.6%) and Finance (5.6%). Siyathemba has a relative comparative advantage in the Construction sector.
9. Most workers in Siyathemba are employed in the Government Services sector (almost 1,750 workers), followed by Agriculture (about 1,100 workers) and the Trade (about 670 workers) sectors.
10. During 2009 the unemployment rate for Siyathemba was estimated at some 34.7% which was slightly higher than the District average. The unemployment rate has steadily increased in Siyathemba over the past decade.

Based on the economic production and employment data presented in this Section, a Development Outlook for LED is presented in Figure 2.15. According to this Figure, Finance, Manufacturing, Construction and the Agriculture sectors performed well locally, as well as in the District over the past decade. On the other hand, the Transport and Mining Sectors in Siyathemba contracted over the last ten years in contrast to the positive growth averages for the District as a whole.

Figure 2.15 – LED Development Outlook, 2012



Source: Quantec Research, 2012

While the first group of sectors can be regarded as drivers of the local economy with more associated aggressive growth strategies, the latter must be interrogated further in the next Section of this report to understand the underlying factors for its contraction (in contrast to positive District growth). These sectors should be associated with business retention and attraction strategies.

SECTION 3: Potential Analysis

3.1. Introduction

The purpose of this Section is to provide an assessment of all the relevant economic activities within the main economic sectors. Each sector will be discussed within provincial and local context, with resultant development opportunities put forward.

Before commencing with the discussion of the relevant development potential criteria, it is deemed necessary to first clarify the meaning of potential. The Concise Oxford Dictionary (1990) describes 'potential' as follows:

- 'capable of coming into being or action'
- 'the capacity for use or development'
- 'usable resources'.

Therefore, potential refers to resources and/or capacity, which can be utilised or developed. In order to identify or determine this development potential and/or opportunities within an economy, a set of criteria is required to evaluate the resource and/or capacity in order to indicate whether said resource can be regarded as having potential. The set of criteria serves as an evaluation tool to identify areas with potential for development and opportunities within each of the local economic sectors. These include:

1. Availability of raw materials and resources
2. Economic linkages
3. Market trends
4. Gap analysis / Agglomeration advantages
5. Logistics / Nodal point function
6. Regional service delivery function
7. Availability of labour
8. Technology change
9. Enabling policy environment

3.2. Agriculture

Agriculture Sector

The agricultural sector incorporates establishments and activities that are primarily engaged in farming activities, although the sector also includes establishments focusing on commercial hunting and game propagation, as well as forestry, logging and fishing.

3.2.1. Pixley Ka Seme Overview

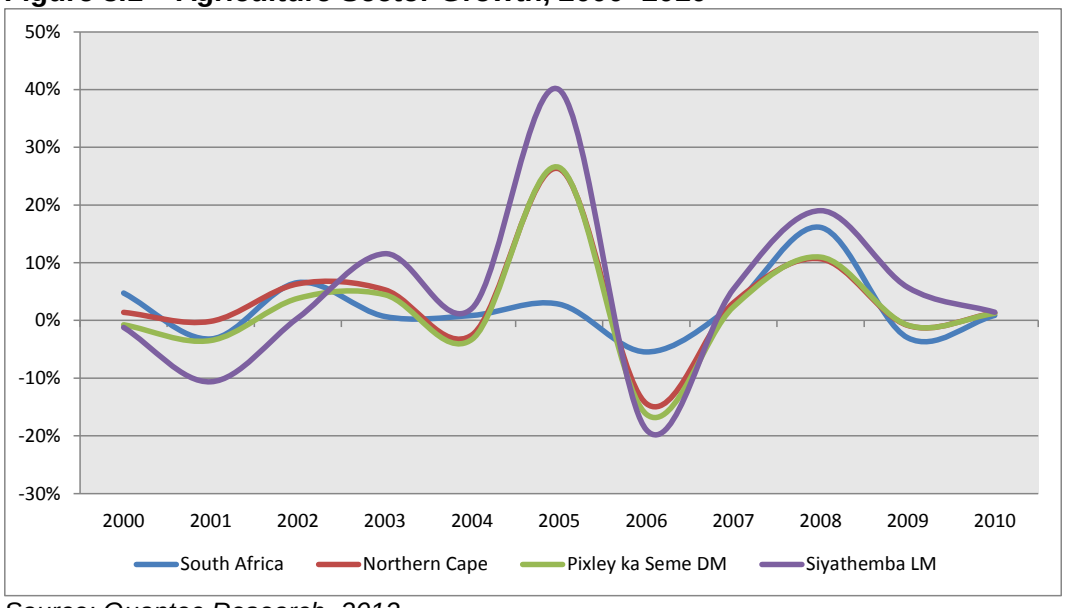
Agricultural production contributed 14.0% to the Pixley Ka Seme District's total economic production in 2008 (GDPR at current prices). Over a ten year period (2000 to 2010), the Agricultural sector experienced an average annual growth of 2.0%.

3.2.2. Siyathemba Overview

The Orange River runs through the Municipality and provides ideal conditions for irrigation farming in Siyathemba, especially the cultivation of grains and vegetables. The main livestock farming in the region include cattle, sheep and goat farming. Game farming also takes place in the area and aids in the development of tourism and hunting activities.

Figure 3.1 indicates the Agricultural production growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. From Figure 3.1 it is apparent that Siyathemba follows a similar production trend to that of Pixley Ka Seme and the Northern Cape Province. The region experienced extensive Agricultural growth from 2006 to 2008.

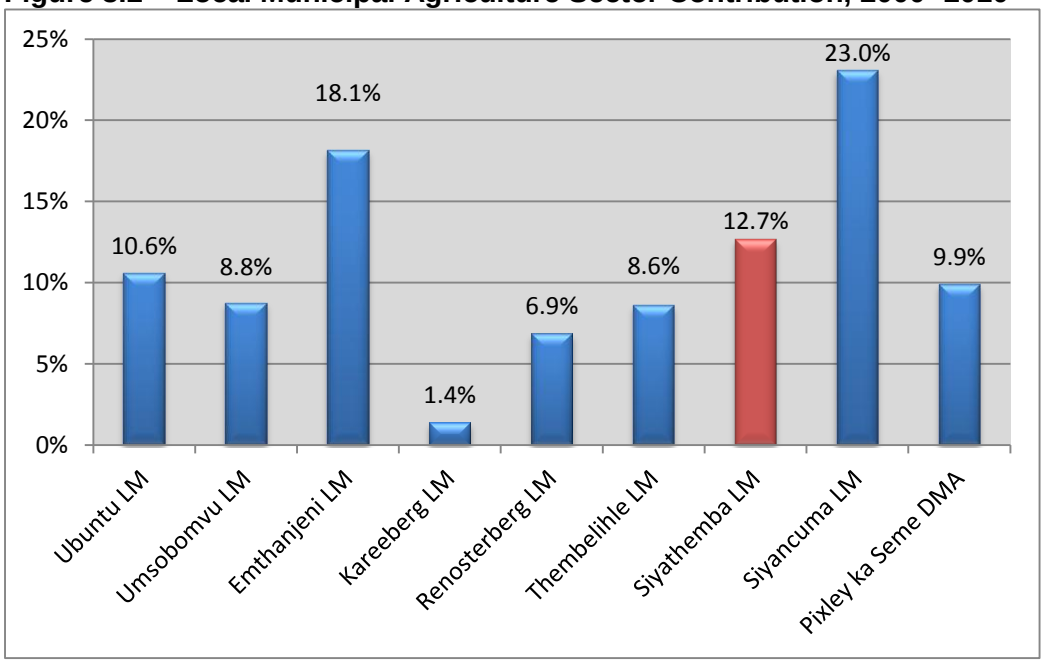
Figure 3.1 – Agriculture Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.2 indicates Siyathemba municipality's Agricultural contribution to Pixley Ka Seme District, compared to the other Local Municipalities. The region contributed 12.7% to the District's sector, making Siyathemba the third largest contributor to the District Agricultural sector.

Figure 3.2 – Local Municipal Agriculture Sector Contribution, 2000- 2010



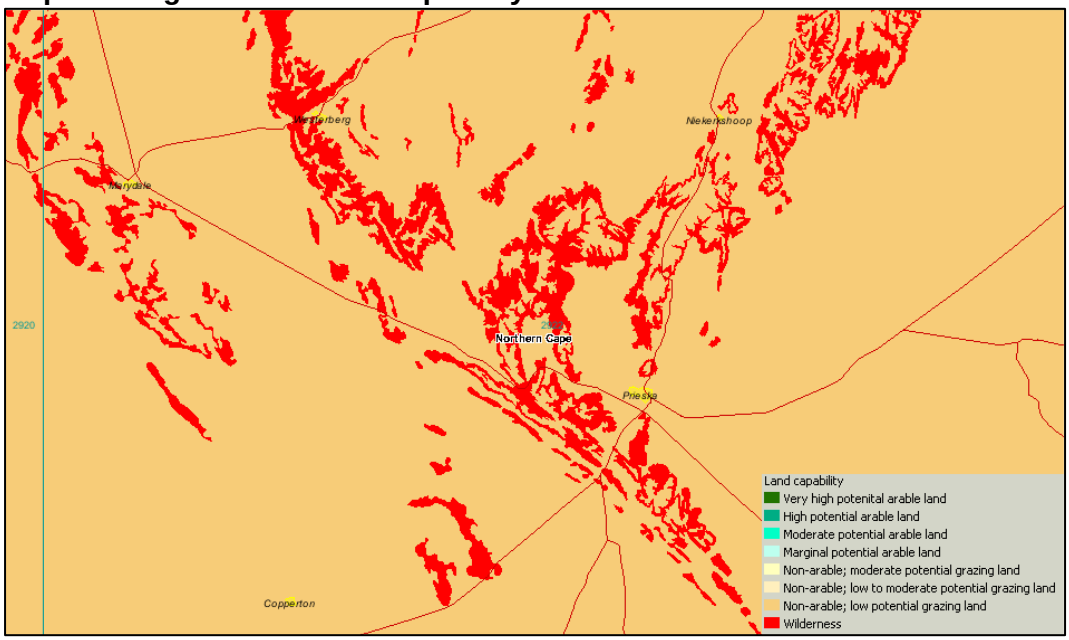
Source: Quantec Research, 2012

Map 3.1 indicates the agricultural land capability of Siyathemba. This map defines the potential for arable and grazing land, which provides an indication of the potential for crop and livestock farming. The map also illustrates the areas that are not specifically suited for agricultural practices.

The following observations may be discerned from the evidence in Map 3.1:

1. Most of the region surrounding Prieska and Niekerkshoop are regarded as low potential arable land. This indicates that the area is not suitable for the cultivation of crops, but is appropriate for sheep and goat farming.
2. Various areas around the region are also regarded as wilderness, and will therefore be suitable for the development of game farming activities.

Map 3.1 – Agriculture Land Capability for Prieska



Source: Agricultural Information System for South Africa (AGIS)

3.2.3. Factors in the Analysis of Development Potential

A. Global Market Trends

Relevant trends that influence the agricultural market include the move towards organic produce, producing goods that work in harmony with, and not against, nature. The concept relies on producing products free from pesticides and antibiotics, giving the farmed animals the chance to roam free as much as possible, within their natural environment. The move towards producing health and diet foods has become a lucrative market within the agricultural sector, providing a wide range of opportunities for farmers to expand their activities to include the production of crops that cater to an ever-growing health-conscious society.

B. Technology Change

Due to the shortage in suitable fertile land for agricultural purposes within the Municipality, the majority of increased production will rely on technological improvements. These technological improvements could increase production and production cost savings, result in better utilisation of scarce resources (i.e. water and fertile land) and enhance management procedures.

Increasingly, methods for extremely efficient irrigation, the use of genetically modified strains that can survive harsher climates, and state-of-the-art indoor growing methods are becoming available.

3.2.4. Development Potential

The following development opportunities have been identified in the Agriculture sector of the Siyathemba Local Municipality:

Table 3.1- Agriculture LED Development Potential

Development Potential
1. Crop farming could be significantly expanded if market demand could be improved. This is especially relevant for irrigated production along the Orange River. 2. Hydroponic production may be well-suited to the area, due to the warm climate (i.e. energy cost saving for hydroponic projects) and available water. 3. Sheep farming could be expanded and beneficiated locally. 4. The local beneficiation of crops can provide valuable local revenue. 5. Electricity shortages could be alleviated through local production. This could justify investment in a local solar power plant. 6. The agricultural sector should be diversified to include higher value products such as essential oils. 7. A poultry and broiler project could be implemented as part of an emerging farmer support programme. 8. A piggery project could be introduced as part of an emerging farmer support programme. 9. Game farming in the area could be expanded to bolster the production of meat. This could then be linked to investment in a local abattoir. 10. There should be a greater focus on agriculture in schools to change the perception of young people that farm work is not “prestigious”. It should be instilled that it is better to work on a farm than being unemployed. 11. Early childhood development programmes should be made available to farm workers (on farms). 12. An agricultural school or college should be developed in the municipal area to foster skills development in the agricultural sector and retain these skills within the local economy.

3.3. Mining

Mining Sector

This sector includes the extracting and beneficiating of minerals occurring naturally, including solids, liquids, crude petroleum and gases. It also includes underground and surface mines, quarries and the operation of oil and gas wells, as well as all supplemental activities for dressing and beneficiating of ores and other crude materials.

3.3.1. Pixley Ka Seme Overview

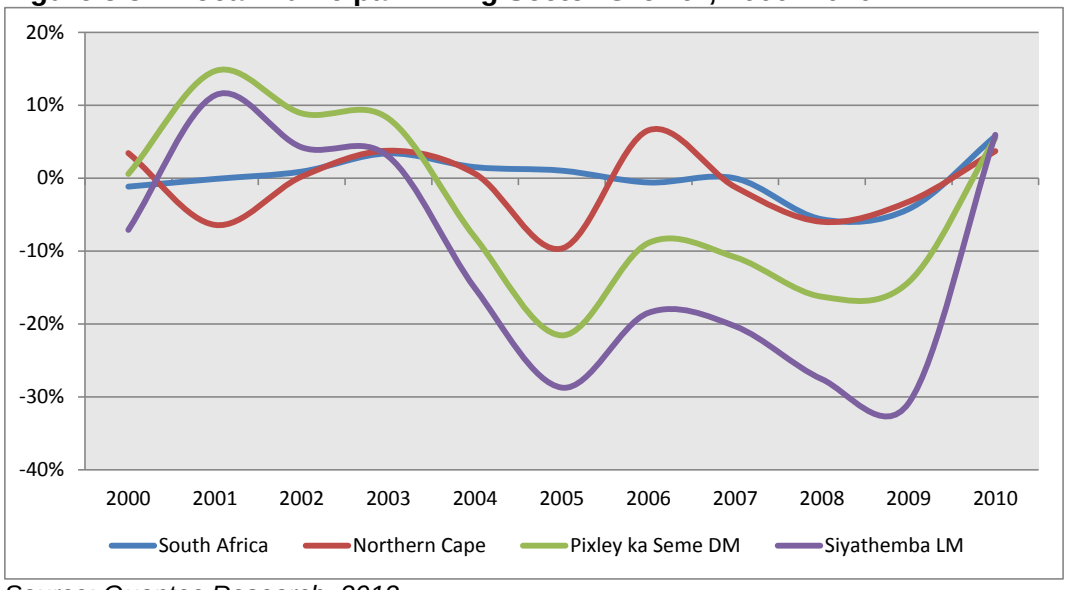
The Mining sector in Pixley Ka Seme contributed 2.8% to the total District GDPR in 2010 (GDPR at current prices). This indicates that the District does not play a significant role in the Provincial Mining sector, where Pixley Ka Seme contributes only 1.4% overall.

3.3.2. Siyathemba Overview

The main deposits in Siyathemba include possible alluvial diamond mining along the Orange River, various semi-precious stones, such as tiger-eye and zinc deposits. The region also has various saltpans for the potential of salt production.

Figure 3.3 indicates the Mining production growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. From Figure 3.3 it is evident that Siyathemba follows a slightly lower production trend to that of the Pixley Ka Seme District's mining sector from 2000 to 2010.

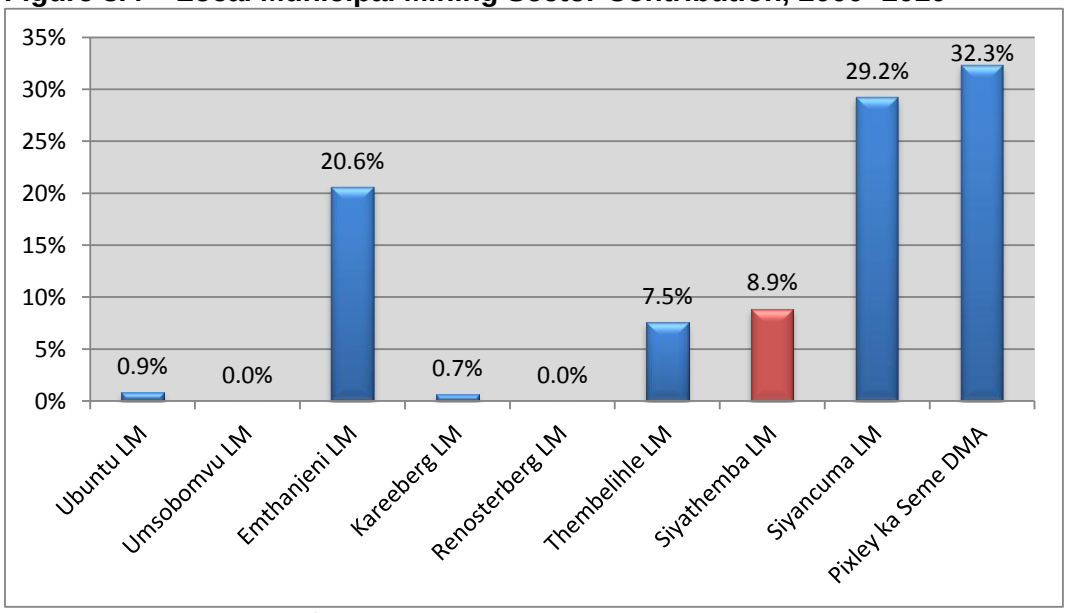
Figure 3.3 – Local Municipal Mining Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.4 indicates the Siyathemba Mining sector's contribution to the Pixley Ka Seme District sector compared to the other Local Municipalities in the region. Siyathemba contributed 8.9% to the District sector, indicating that the region is the fourth most significant mining region in Pixley Ka Seme.

Figure 3.4 – Local Municipal Mining Sector Contribution, 2000- 2010



Source: Quantec Research, 2012

3.3.3. Factors in the Analysis of Development Potential

A. Economic Linkages

Growth around a mineral-based project can be fostered by broadening the economic linkages that arise as a consequence of the project's activities in order to meet the challenges of a resource-based economy. There are three types of economic linkages that could be fostered/encouraged around a mining (or natural resource-based) operation in a particular area:

1. Downstream linkages or activities engaged in the further beneficiation or processing of an ore or concentrate.
2. Side stream linkages arising from the supply of local goods and services to operating companies.
3. Geographical linkages. Promoting the development and expansion of such activities provides the basis for the emergence of local clusters of industrial activities which can spin-off into other areas and applications engendering much greater economic benefits for a region in terms of diversification and job creation.

The challenge facing Siyathemba is how to broaden and encourage the opportunity spaces presented by the availability of mineral resources. Mineral-based activities, whether large- or small-scale, have the potential to stimulate economic diversification and industrial development in a region provided a number of issues are borne in mind.

Firstly the overall economic impact of a specific mining or minerals processing project is highly dependent on the fullness and depth of the 'cluster' of activities that form and agglomerate around it. Clustering or linkage development arises both as a direct and indirect consequence of the construction and successful operation of a particular resource-based project. Direct impacts include upstream, side stream and downstream activities. Indirect impacts refer to the broader economic linkages and spin-off effects that are induced in the local economy as a consequence of each of these direct impacts. These include the linkages that arise between the various resource-based projects themselves as well as different sectors in the immediate vicinity of the project and further afield. The scale and depth of clustering that arises as a consequence of indirect impacts is likely to be much more

extensive and the employment multipliers much greater than those arising from direct spinoffs. It is the degree of direct linkage development, therefore, which ultimately determines the long-term maturity and success of clustering around a project and in the local economy. Each direct spin-off from the initial industry provides the impetus for further employment spinoffs either in supporting industries and enterprises or the service sector. These indirect spinoffs, in turn, facilitate the diversification of the economy through the development of additional manufacturing and service activities as employee demands for different products begins to increase.

Secondly, a number of possibilities in side stream and indirect activities exist. 'Side stream' activities refer to the service network, vendors and key contracting firms directly affiliated with a particular mineral project's operations. Not only is this sector significant in terms of contributing to broadening the local employment base and enhancing the potential for further employment spinoffs, but it is of critical importance to the functioning of all departments within a particular mineral-based operation. The 'side stream' sector associated with each mine or processing plant usually comprises vendors of various sizes, providing either hard or soft services.

Hard services are usually production-related activities and plant specific and include:

1. Hard engineering companies
2. Engineering suppliers
3. Construction and manufacturing firms
4. Heavy equipment, industrial and electrical suppliers

While most of these activities are technical in nature and require skills which are largely absent in the area and sourced from outside, there are, nevertheless, a number of areas where SMMEs can be developed as preferred suppliers and establish workshops and facilities in the immediate vicinity of such plants. Such opportunities include:

1. Localisation of spares (conveyors, mechanic al power equipment, motors and generators, bearings, pumps, fasteners, springs etc.)
2. Maintenance facilities
3. Supply of consumables required in the daily operation of the project (chemicals, reagents, etc.).

Soft (non-production) services include:

1. Security,
2. Industrial cleaning and plant hygiene
3. Garden/landscaping
4. Interior plant management
5. Consumables
6. Catering
7. Personal protective equipment
8. Legal/logistic activities
9. Consultants (IT, environmental and industrial)
10. Waste management
11. Painting services, etc.

Such functions offer numerous opportunities for SMME development and economic diversification. Training programmes and apprentice schemes may need to be introduced to improve the skills and capabilities of the workforce to be able to take advantage of and identify new opportunities. Industrial development can also be enhanced by recognising and targeting the indirect activities that are often associated with mineral-based operations.

Various types of indirect impacts generally arise as a consequence of the operation of a resource-based plant (and its downstream operation) at different levels:

1. At the local level, suppliers contracted directly to the resource-based plant will foster additional linkages through interaction with other suppliers of goods and service firms located in the area.
2. Indirect impacts and multiplier effects are enhanced and fostered as a result of an increase in disposable income – a direct impact of employment at the plants and in the supplier network. As the wages and security of livelihoods increases, demand patterns change. A more diversified mix of enterprises providing a range of products and services starts to emerge. Such activities include, inter alia, entertainment, retail, education, care/medical, residential and transport facilities.
3. Clustering and diversification arises from inter-project linkages – i.e. utilisation of inputs, outputs and by-products produced by each mine and processing plant.
4. Another indirect possibility is in encouraging the indirect impacts related to inter-sectoral linkages – i.e. linkages arising between the mining sector and other industrial and economic sectors in the Municipality. Other sectors that stand to benefit from these mineral based projects include transport, construction, Agri- and geological tourism, etc. Close collaboration and interaction between the private and public sector will be critical in order to capitalise on these indirect opportunities.

B. Logistics

The cost and availability of suitable transport systems remain one of the major factors inhibiting the further development of the Mining industry in the Northern Cape Province. It affects both the expansion of the iron mines, as well as the development of new mines, both large and small.

Another possibility arises in looking for ways in which the Municipality can assist in making it financially feasible to beneficiate locally. The beneficiated product would have more value and would require less rail capacity.

C. SMME Support

An association dedicated to the support and development of the SMME side of the minerals industry in Siyancuma is required. In order to optimise the exploration, production and financial aspects of SMME mining, central co-ordination of the efforts of producers must be investigated, as centralised services such as geological consulting, exploration services, mining, legal and financial services. It is impossible to mine without adequate funding; SMMEs should be assisted with issues such as access to capital in order for them to fully optimise their operations.

D. Small Scale Mining Development

The Siyathemba Local Municipality should assist as many small scale operations as possible to get up and running. In some cases, this will involve upgrading of the infrastructure such as roads, in others it could involve research into minerals and their markets or assisting with equipment or accommodation for small projects. In order for this to occur, the Municipality will have to look at the infrastructure, such as roads and ensure that they are in a condition fit for transporting the various mineral products to the market. Housing for lower income groups also needs to be addressed and this may present an opportunity to manufacture bricks locally.

E. Availability of Labour

With high unemployment levels in Siyathemba, there is a large labour pool to generate employment in the Municipality and this labour pool could be incorporated into Mining projects. There is however, a need for skilled labourers and the region has a shortage of

such skills. Big mining companies have to take initiative to train local workers for improvement of skills in the local Mining sector.

3.3.4. Development Potential

The following development opportunities have been identified in the Mining sector of the Siyathemba Local Municipality:

Table 3.2- Mining LED Development Potential

Development Potential
1. Semi-precious stones should be commercially mined and locally beneficiated. 2. Building sand and clay could be mined throughout the area, especially along the Orange River. 3. Locally extracted clay could be used for manufacturing building bricks. 4. A local gemstone beneficiation plant can be refurbished and engaged in production again. This pant could be used to cut and polish locally mined semi-precious stones. 5. The production and packaging of table salt and salt products is a viable option to gain valuable sources of revenue.

3.4. Manufacturing

Manufacturing Sector

The manufacturing sector is broadly defined as the physical or chemical transformation of materials or compounds into new products and can be classified into sub-categories, namely:

1. Food, beverages and tobacco
2. Textiles, clothing and leather goods
3. Wood and paper; publishing and printing
4. Fuel, petroleum, chemical and rubber products;
5. Other non-metallic mineral products, e.g. glass;
6. Metal products, machinery and household appliances;
7. Electrical machinery and apparatus
8. Radio, TV, instruments, watches and clocks
9. Transport equipment
10. Furniture and other manufacturing

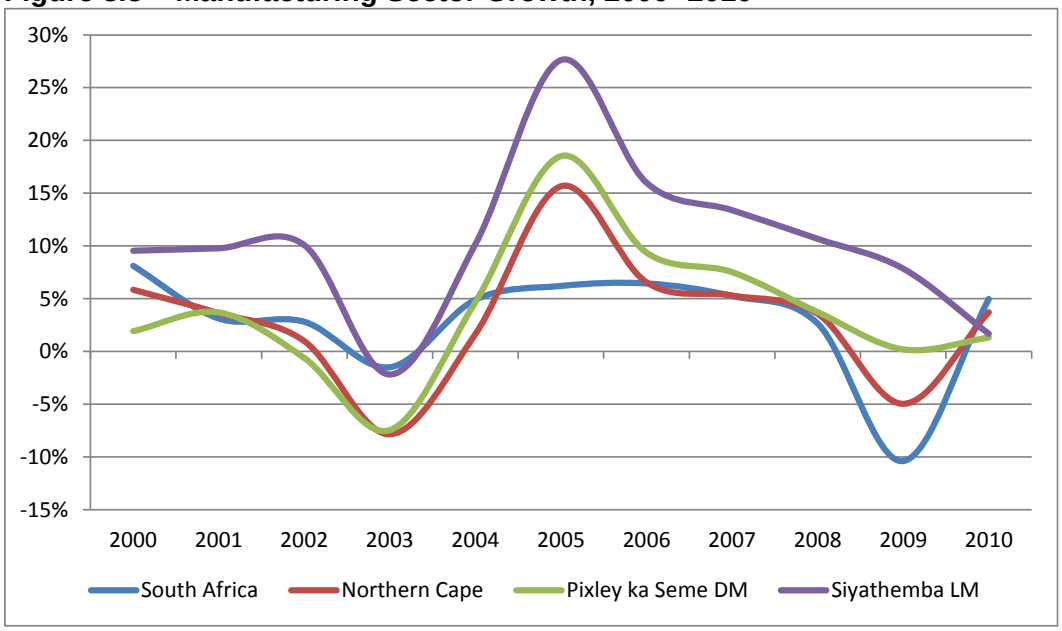
3.4.1. Pixley Ka Seme Overview

The Pixley Ka Seme Manufacturing sector contributed 11.9% to the total GDPR (GDPR at current prices) of the Northern Cape in 2010. Manufacturing in the district has strong links with the Agriculture sector.

3.4.2. Siyathemba Overview

Agro-processing is the main Manufacturing activity in Siyathemba, which consists of the production of various plant and meat products. Figure 3.5 indicates the Manufacturing production growth of Siyathemba from 2000 to 2010 as compared with the District, the Province and South Africa. From Figure 3.5, it is evident that Siyathemba follows a relatively higher production trend to that of the Pixley Ka Seme District's manufacturing sector, except for a decline post-2009.

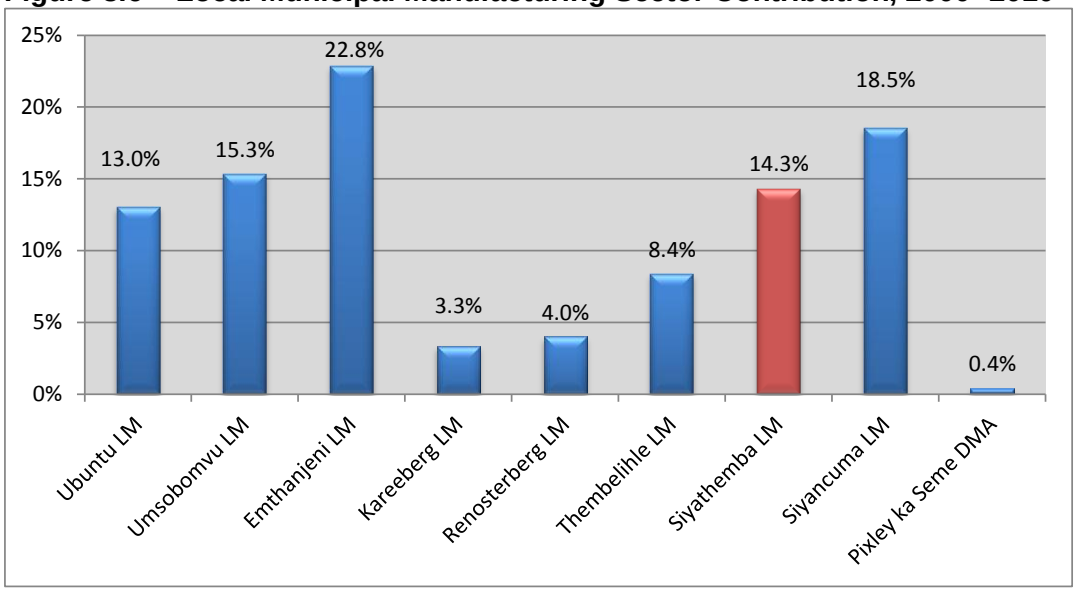
Figure 3.5 – Manufacturing Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.6 indicates the Siyathemba Manufacturing sector's contribution to Pixley Ka Seme District sector as compared to the other Local Municipalities in the region. Siyathemba contributed around 14.3%, which ranks the Municipality fourth, in terms of Manufacturing, in Pixley Ka Seme.

Figure 3.6 – Local Municipal Manufacturing Sector Contribution, 2000- 2010



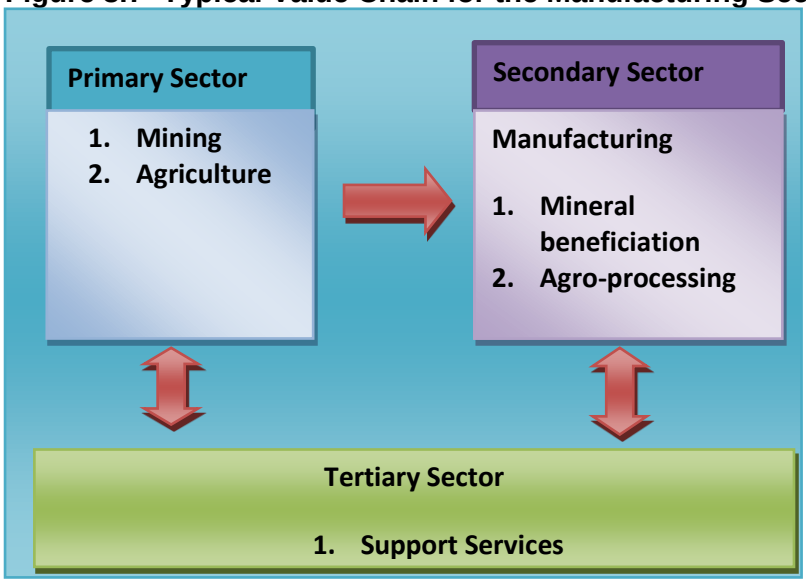
Source: Quantec Research, 2012

3.4.3. Factors in the Analysis of Development Potential

A. Value Chain

The value chain in manufacturing usually progresses from the primary sector to the secondary sector and finally to the tertiary sector. At any stage during a value chain, inputs are required to proceed to the next "phase". This may be in the form of raw materials and goods and services. The various actors interact between the sectors, forming linkages between sectors which play a crucial role in ensuring the sustainability of the manufacturing sector. This interaction essentially relates to a supply and demand side interaction between the role-players. Siyathemba provides opportunities in agro-processing and mineral beneficiation. Although the value chain for the Manufacturing sector is more sophisticated, a simplistic value chain for the sector is depicted in Figure 3.7.

Figure 3.7- Typical Value Chain for the Manufacturing Sector



B. Economic Linkages

Both backward and forward links with agriculture, as well as mining activities have gone largely unexploited, with input materials and machinery largely being imported into Siyathemba and raw products leaving the Municipality, as opposed to significantly more valuable processed products leaving the area.

C. Availability of Labour and Skills

A shortage of critical skills needed within the manufacturing sector, such as technical and artisanal skills, is one of the major development constraints within this sector. This has also been acknowledged as a "binding constraint" within the Manufacturing Sector through development policies, such as the new growth path and IPAP2. This provides an opportunity for Siyathemba to develop a manufacturing skills training centre.

D. Global Market Trends

Reduced trade barriers have created enormous opportunities for producers in South Africa to sell goods and services in other countries. Foreign companies also compete for local consumers' patronage and globalisation also poses a serious threat. Consciously making

environmentally-beneficial decisions has gone from a luxury choice to a necessary one. Over the past decade, 'green' was considered a lifestyle choice adopted by environmentalists, then the affluent, but today it has become a mainstream feature of many products and services.

Green Manufacturing

Green manufacturing has become a powerful marketing tool. Consumers increasingly have begun buying green products that are more cost effective and healthier and leave less of a carbon footprint on our planet. As a result, manufacturers are developing products that fit this need. At the same time they are implementing supply chains that are greener.
The basics of green manufacturing focus on minimizing the impact of the manufacturing process on the environment. It begins with the development of green products and extends to implementing a green supply chain. Once this has been done, green manufacturing can be turned into a marketing advantage. Manufacturers viewed as being green, such as Toyota and General Electric, have converted the concept into more sales. The following are some basic characteristics of green manufacturing:

1. Less consumption of natural resources, such as water and coal.
2. Less energy used in production
3. Less gas and toxic material released into the environment
4. Less waste created from the manufacturing process

Product development studies show that the design stage determines 70% of a product's environmental impact. Biodegradability results in a substantial savings for many local communities that pick up green waste. If customers gather leaves and such into plastic bags, the garbage company has to remove all the bags, which is costly. With the biodegradable garbage bag, everything can be composted together, and that translates into huge savings.

Green Supply Chain

To be successful, green products require a green supply chain. Supply chains involve everything from the purchase of production materials to the delivery of the finished product to the customer. This means every aspect of a business needs to adopt a green approach. To make this happen, manufacturers need to implement an overall green strategy. [1]

E. Niche Markets

A niche market is a focused targetable segment of a market. A business that is focused on a niche market is usually offering a product or service that is not being addressed by mainstream providers. In other words a niche market is a narrowly defined segment of potential customers.

Niche markets are typically ignored by large businesses because the market is too small to be interesting or to make their economies of scale effective. Niche markets are therefore ideal for small, specialised businesses. That is because these small specialised businesses can generally charge a premium or enjoy the benefit of little (or even no) competition. Siyathemba has the opportunity to manufacture and package "niche" agricultural products for markets in Gauteng and the rest of the country.

[1] Source: All Business, Green Manufacturing – Supply Chains and Marketing (www.allbusiness.com)

F. Technology Change

The world of manufacturing has reached a turning point because of the influence and impact of Technology. Manufacturing information systems today support the production functions of companies. Production functions include the activities concerned with planning and control of the processes used in producing goods and services. Computers are at the root of these processes. Computer-based manufacturing information systems use several major techniques to support Computer-Integrated Manufacturing (CIM). Benefits of CIM systems include:

1. Increased efficiency through work simplification and automation
2. Improved utilization of production facilities
3. Reduced investment in production inventories using Just-In-Time practices
4. Improved customer service.
5. Improving Information Technology.

G. Enabling Environment

The following factors should be taken into account when accessing the readiness, or enabling environment of an area:

1. The quality and extent of hard infrastructure such as road and rail networks.
2. The sophistication of local telecommunications, banking and finance services similarly impact on the input and operational costs of doing business.
3. The extent to which spatial and land planning policies and documents are flexible to the needs of businesses and the relative ease of following land planning processes, such as rezoning applications.
4. The sophistication of the public sector.
5. The quantity and quality of available labour and training programmes, in relation to the specific human resource requirements of investors.
6. Quality of life factors, such as the supply of housing and personal lifestyle facilities (such as educational, cultural and recreational services) also have an impact on the attraction of particular investment.

3.4.4. Development Potential

The following development opportunities have been identified in the Manufacturing sector of the Siyathemba Local Municipality:

Table 3.3- Manufacturing LED Development Potential

Development Potential
1. The opportunity exists to establish an agro-processing plant in Prieska, thereby beneficiating produce from the agriculture sector. 2. Investment in a local recycling plant (paper, plastic and glass) provides a good opportunity to expand job creation. 3. The implementation of training and skills development programmes in local communities (focussed on the youth). 4. The local production of solar panels that could supply the Utilities sector of the Northern Cape. 5. The production of local Arts & Crafts (such as bead work) for the tourism market will provide much needed revenue to the area. 6. Investment in a local leather tannery, cotton gin, game abattoir and a chicken broiler house will provide opportunities for beneficiation of agricultural produce. 7. Investment in a construction equipment plant will expand manufacturing opportunities, as well as provide for skills development in the area.

3.5. Retail and Wholesale Trade

Retail and Wholesale Trade Sector

This sector is defined as the resale (sale without transformation) of new and used goods to the general public for personal or household consumption or use by shops, department stores, stalls, mail-order houses, hawkers and peddlers, consumer cooperatives, etc.

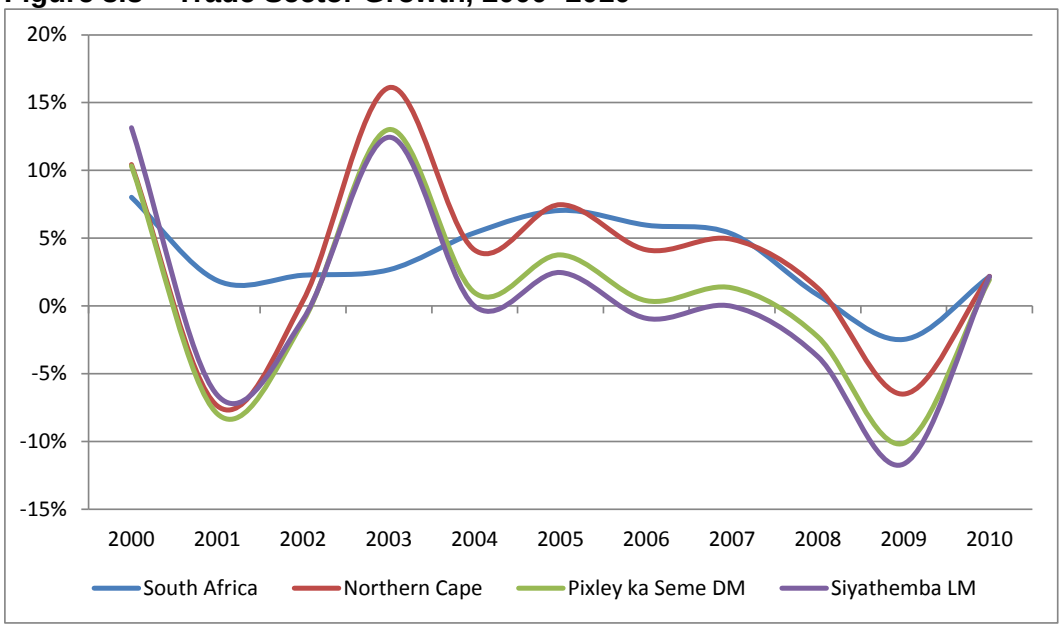
3.5.1. Pixley Ka Seme Context

The Trade sector in Pixley Ka Seme contributed 12.1% to the total District GDPR in 2010 (GDPR at current prices). This District contributed 12.6% to the Northern Cape Wholesale and Retail Trade Sector, overall.

3.5.2. Siyathemba Context

Figure 3.8 indicates the Wholesale and Retail Trade Sector production growth of Siyathemba from 2000 to 2010, compared with the District, the Province and South Africa. From Figure 3.8 it is apparent that Siyathemba experienced a slightly lower production trend to that of the Pixley Ka Seme District's Trade sector, however the sector showed positive growth in 2010.

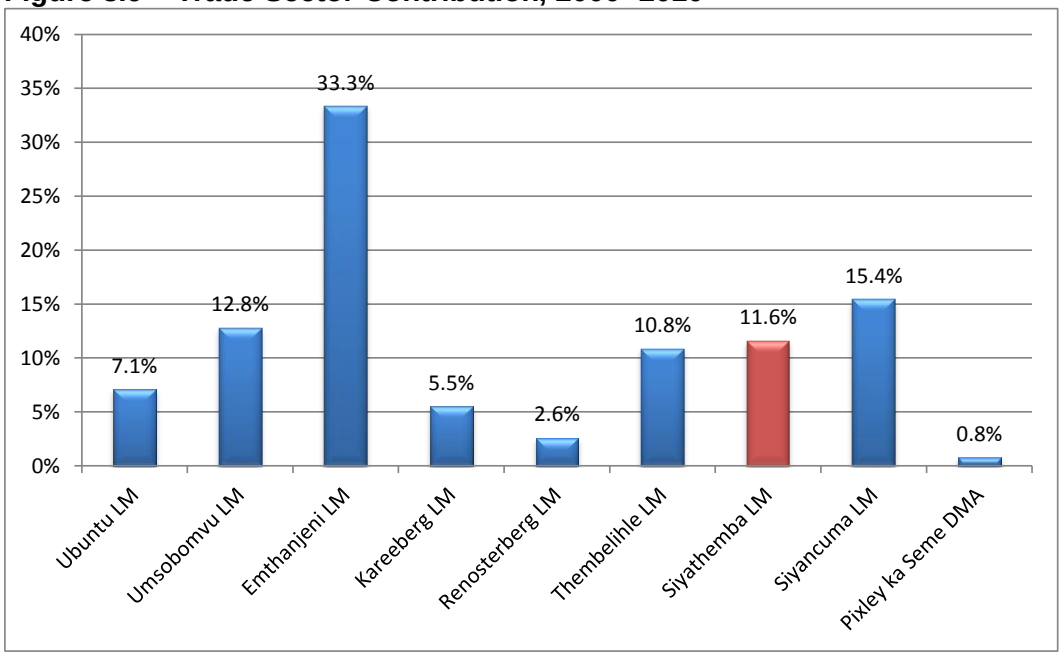
Figure 3.8 – Trade Sector Growth, 2000- 2010



Source: Quantec Research, 2012

Figure 3.9 indicates the Siyathemba Wholesale and Retail Trade sector's contribution to the Pixley Ka Seme District sector as compared to the other Local Municipalities in the region. Siyathemba contributed around 11.6%, the fourth ranked Municipality, in terms of Trade in Pixley Ka Seme.

Figure 3.9 – Trade Sector Contribution, 2000- 2010



Source: Quantec Research, 2012

Table 3.4 indicates the expenditure profile of Siyathemba and indicates the demand for various Trade categories. Food and beverages made up 26.0% of household expenditure in Siyathemba, followed by rent for accommodation at 14.6%.

Table 3.4- Main Expenditure Categories

Household Expenditure Category	%
Furniture, household appliances, etc.	1.1%
Personal transport equipment	3.7%
Recreational and entertainment goods	1.8%
Other durable goods	0.6%
Clothing and footwear	4.1%
Household textiles, furnishings, glassware, etc.	1.0%
Motor car tyres, parts and accessories	1.2%
Recreational and entertainment goods	1.0%
Miscellaneous goods	0.6%
Food, beverages and tobacco	26.0%
Household fuel and power	3.0%
Household consumer goods	3.7%
Medical and pharmaceutical products	2.0%
Petroleum products	3.1%
Recreational and entertainment goods	0.8%
Rent	14.6%
Household services, including domestic servants	2.8%
Medical services	6.5%
Transport and communication services	9.1%
Recreational, entertainment and educational services	4.0%
Miscellaneous services	9.3%

Source: Quantec Research, 2012

3.5.3. Development Potential

The following development opportunities have been identified in the Wholesale and Retail Trade sector of the Siyathemba Local Municipality:

Table 3.5- Wholesale and Retail Trade LED Development Potential

Development Potential
1. There may be opportunities to invest in a new small grocery shop and restaurant in Prieska. 2. Railway infrastructure should be restored and placed back into operation to reduce the cost of bulk transport. 3. Training and registration assistance should be provided to construction workers. This initiative must be aimed at placing these workers in a position where they can operate their own businesses and tender for government contracts. 4. Entrepreneurship training and development programmes should be implemented in local communities to facilitate the development of SMMEs.

3.6. Tourism

Tourism Sector

Tourism is not an economic sector on its own, but forms part of other economic sectors especially the Trade, Transport and Finance sectors. However, due to its increasing importance as an income and employment generator in South Africa, it is believed that this sector should be discussed separately from the other sectors.

3.6.1. National and Provincial Context

Domestic tourism is a significant contributor to the tourism industry that often receives less attention than international tourism. In South Africa, domestic tourism contributes significantly to the tourism sector, accounting for 79% of total tourism in 2010. However, it contributed only 23% to total tourism revenue in the same year. The total number of trips taken in South Africa has decreased by 600 000, while the number of travelling adults decreased by 1.2 million. This implies that the average number of trips taken per traveller has increased.[2]

3.6.2. District and Local Context

The town of Prieska is located on the south bank of the Orange River at the foot of the Doringberg, it was originally named Prieschap, a Khoisan word meaning 'place of the lost she-goat'. The site of the town, founded in 1882 and renowned for its semiprecious stones, was a fording place used by early travellers[3].

The following are the main Tourism attractions in the region:

1. Die Bos Nature Reserve
2. British Fort
3. Green Valley Nuts
4. The Oranjezicht and T'Keikamspoort Hiking Trails
5. Khoisan Rock Art
6. Memorial Garden
7. Prieska Museum
8. Ria Huysamen Aloe Garden
9. Schumann Rock Collection
10. Wonderdraai Island

[2] 2010 Annual Tourism Report – South African Tourism, 2011
[3] Northern Cape Tourism

3.6.3. Development Potential

The following development opportunities have been identified in the Tourism sector of the Siyathemba Local Municipality:

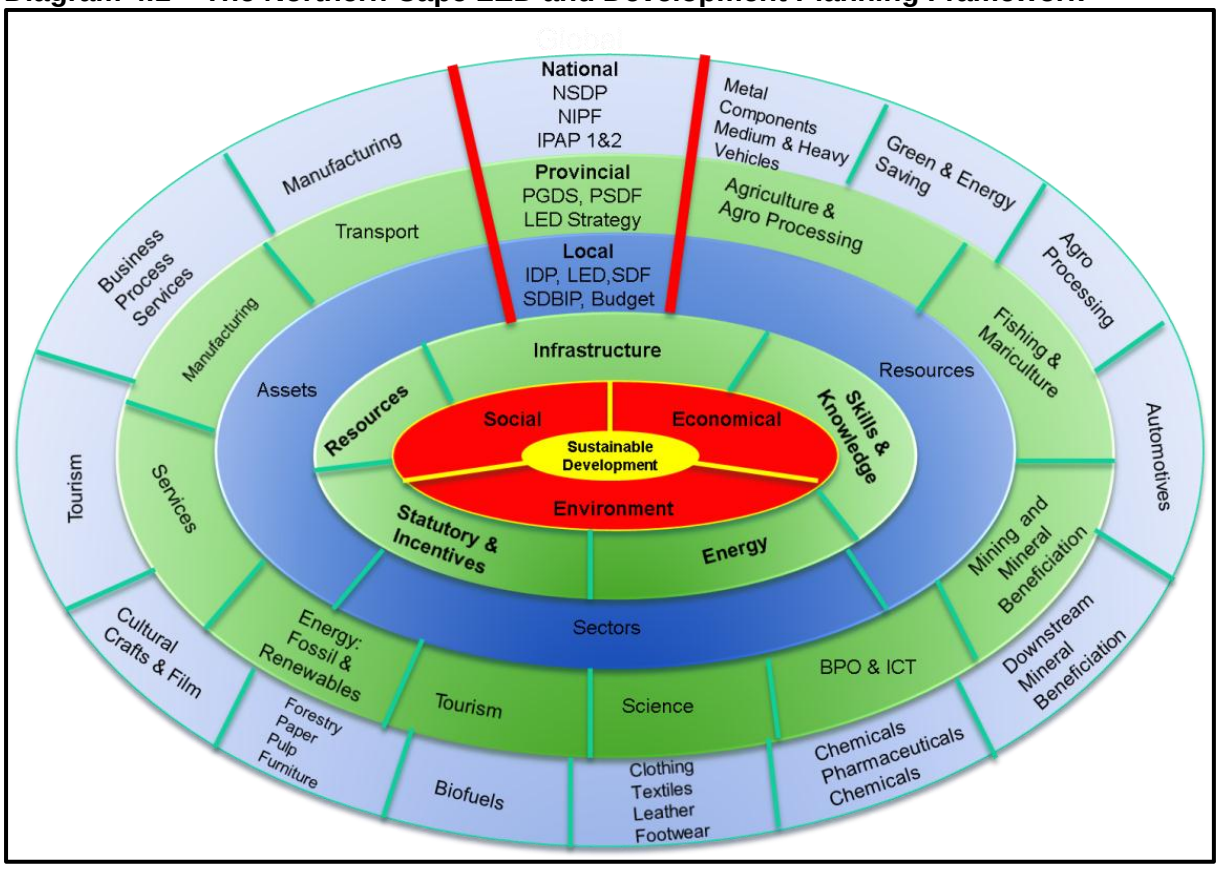
Table 3.6- Tourism LED Development Potential

Development Potential
1. Resort and adventure tourism along the Orange River will result in enticing tourists to explore the region for longer and staying for lengthier periods of time. 2. The “Die Bos” area could be developed into a tourism resort with associated adventure tourism activities, such as water sports and hiking. 3. Expanding the game tourism and hunting industry can enhance the eco-tourism profile of the region. 4. Mineral processing tourism can become an inviting prospect for visitors. If the old gemstone processing plant can be renovated, it could also become a popular tourist destination. 5. A local attraction known as “Die Koppie” could facilitate local festivals. 6. The area should develop a unique tourism brand of its own and marketed on various platforms. 7. Investment in a new casino near Prieska may attract travellers from all over. 8. The re-routing of the N10 highway through Prieska will provide tourists the opportunity to appreciate the town and view it as a stop-over or destination on its own.

SECTION 4: LED Framework

This Section presents the LED Framework and a review of the LED opportunities that have been identified, as well as potential development projects that may be associated with these opportunities. The projects will subsequently be submitted and prioritised according to their economic impact on the area and then packaged to produce a descriptive overview.

Diagram 4.1 – The Northern Cape LED and Development Planning Framework



Source: Northern Cape Department of Economic Development and Tourism

Diagram 4.1 presents the Northern Cape LED and Development Planning Framework. This Framework is vitally important and will be applied to the outcomes of the situational analysis. Important in this regard is to interpret the findings of the Opportunity Analysis in terms of:

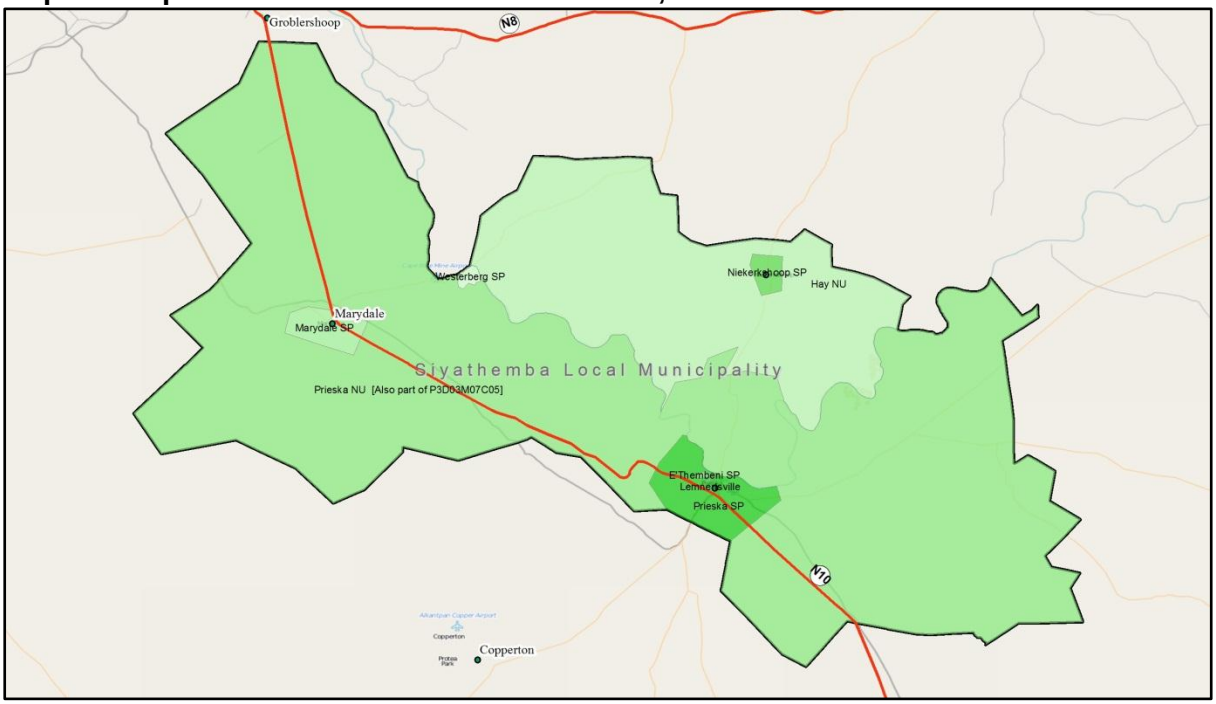
- Available skills and knowledge
- Available energy
- Available development incentives
- Available primary resources

4.1. Local Development Context

4.1.1. Availability of Skills & Knowledge

The spatial distribution of skilled labour in the Municipal area is illustrated by Map 4.1 and Table 4.1. The total number of workers in the Municipal area remained between 4,000 and 5,000 between 2001 and 2010.

Map 4.1 – Spatial Distribution of Skilled Labour, 2010



Source: Spatial projections based on Census 2001 and Quantec Research 2012

From this total, the number of *highly skilled* workers in the area increased from 389 in 2001 to 467 in 2010, while the number of *skilled* workers remained at about 1,500 to 1,700. Most skilled and highly skilled workers in the area can be found in Prieska and its surrounding areas.

Table 4.1 – The availability of Skills within the Local Municipality, 2010

Sub-Place	Highly Skilled			Skilled			Semi- and -unskilled		
	2001	2010		2001	2010		2001	2010	
E'Thembeni SP	33	31	(↘)	156	211	(↘)	294	344	(↗)
Marydale SP	45	43	(↘)	82	111	(↗)	106	124	(↗)
Niekerkshoop SP	36	34	(↘)	162	219	(↗)	89	104	(↗)
Prieska SP	221	210	(↘)	357	484	(↗)	178	208	(↗)
Lemnertsville	91	86	(↘)	316	428	(↗)	446	522	(↗)
Hay NU	3	3	(→)	38	51	(↗)	183	214	(↗)
Prieska NU [Part of P3D03M07M05]	62	58	(↘)	102	139	(↗)	468	548	(↗)
Westerberg SP	1	1	(→)	1	1	(→)	1	1	(→)

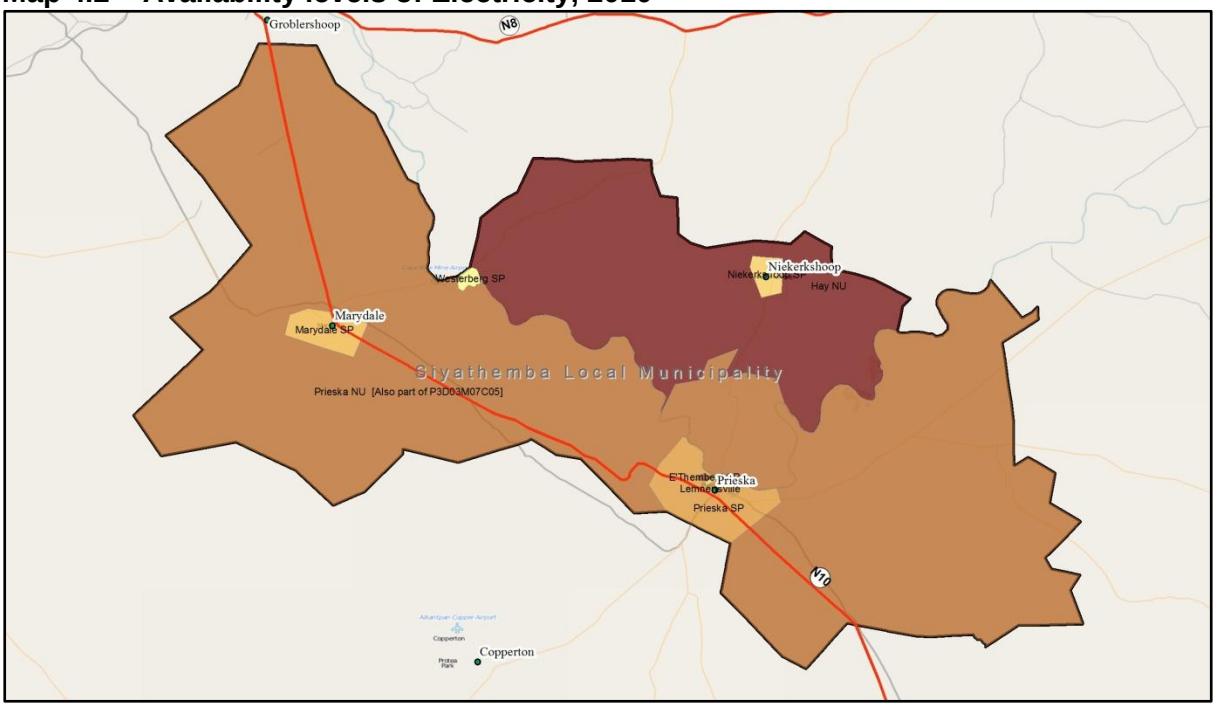
Source: Spatial projections based on Census 2001 and Quantec Research 2012

Among the highly skilled group, most workers could be classified under the occupation group *technicians and associate professionals.* This was true for *craft and related trades* workers under the skilled group. Almost 50% of workers were regarded as semi- to unskilled during 2010.

4.1.2. Available Energy

The level of electricity availability is illustrated by Map 4.2 and Table 4.2. It was estimated that some 85% to 90% of households in the Municipal area had access to electricity during 2010.

Map 4.2 – Availability levels of Electricity, 2010



Source: Spatial projections based on Census 2001 and Quantec Research 2012

Most households in Niekerkshoop have access to electricity, while the urban areas of Prieska and Marydale have limited access. The rural areas outside Niekerkshoop have the lowest levels of electricity access in the area.

Table 4.2 – Access to Electricity within the Local Municipality, 2010

Sub-Place	Number of Households		Level of Access
	2001	2010	
E'Thembeni SP	585	790	75.9%
Marydale SP	412	556	84.2%
Niekerkshoop SP	399	539	90.9%
Prieska SP	520	702	82.1%
Lemnertsville	1165	1 574	96.4%
Hay NU	88	119	58.6%
Prieska NU [Part of P3D03M07M05]	393	531	80.2%
Westerberg SP	1	1	100.0%
Total	**3561**	**4 812**	**85.2%**

Source: Spatial projections based on Census 2001 and Quantec Research 2012

The level of household access to electricity has improved slightly from 85.4% in 2001 to over 87% during 2010. Most farms in the area procure their electricity directly from ESKOM.

4.1.3. Development Incentives

The Local Municipality does not currently offer any local investment incentives to potential developers. Although Municipalities in South Africa are legally not allowed to provide discounts on VAT or other national taxes, it is recommended that Ubuntu consider the following types of incentives to encourage local development:

Infrastructure
Infrastructure concessions often involve the provision of serviced industrial and commercial sites or special efforts to develop infrastructure and services in selected commercial areas in response to the needs of prospective investors. The implications of these infrastructure concessions are that the investor will be attracted, if the local authority is flexible and sensitive in amending its development/delivery schedule to accommodate the investors' needs.

Land and Buildings
An incentive package of this type may involve the sale, transfer or rental of land, buildings or other facilities owned by the local authority on concessionary terms in order to attract investment. This further implies assistance by the local authority in order to obtain premises. However, if the local authority intends making some of its own assets available, they must ensure that they are in compliance with National and Provincial legislation on the disposal of public assets (e.g. the Public Finance Management Act)

Regulatory reform
These concessions involve special efforts by the local authority to reduce constraining regulation and zoning that may stand in the way of potential business development. This aspect implies an accurate and speedy system to supply information relating to, and the approval of potential investment. In this regard the fast tracking of re-zoning applications and the issues of zoning certificates are very important.

Finance
Some international cities provide financial assistance in the form of special grants, access to start-up capital, bridging finance and credit, loan guarantees or the underwriting of risks. However, South African local authorities are currently prohibited from undertaking in these activities. The Municipality's LED Unit should however, have a database of "funders on hand" (including their qualifying criteria) to assist investors and make meaningful recommendations. This is especially with regards to local entrepreneurs and SMMEs.

Approval process
One of the most basic incentives involves facilitating prompt decisions such as the approval of building plans and re-zoning applications. Prospective investors will lose interest if local authorities take too long to approve plans and applications. The establishment of a one-stop centre could facilitate this process more efficiently and would go a long way to provide a convenient and professional service to potential investors and developers. This centre must be well marketed and its services integrated with other support institutions (such as SEDA).

4.1.4. Available Primary Resources

Based on the Agricultural Census of 2007 by Statistics South Africa, various planted and animal commodities were produced in the area. Table 4.3 illustrates planted crops being cultivated in the area.

Table 4.3 – Planted crops within the Local Municipality, 2007

Planted Crop	Production (t)	Income (R)
Maize	87 869	95 208 000
Wheat	51 226	75 605 000
Barley	1 225	2 412 000
Groundnuts	801	2 772 000
Potatoes	19 098	36 800 000
Onions	4 620	7 113 000
Wine grapes	2 552	7 547 000
Total	**167 391**	**227 457 000**

Source: Agricultural Census of 2007 by Statistics South Africa

From this Table, it is evident that the area made a significant contribution to crop production in the Northern Cape, with reference to maize and wheat, as well as various other crops. These commodities generated a total farm income of more than R227 million during 2007, of which the sale of maize and wheat made the largest contribution.

Livestock production also made a significant contribution to the Agriculture sector of the Municipality (see Table 4.4).

Table 4.4 – Livestock production within the Local Municipality, 2007

Livestock	Total on Farms	Sold	Income (R)
Cattle	6 209	3 475	11 478 000
Sheep	159 141	87 678	46 131 000
Goats	4 939	5 003	1 702 000
Game	Unknown	187	322 000
Total	**170 289**	**96 343**	**59 633 000**

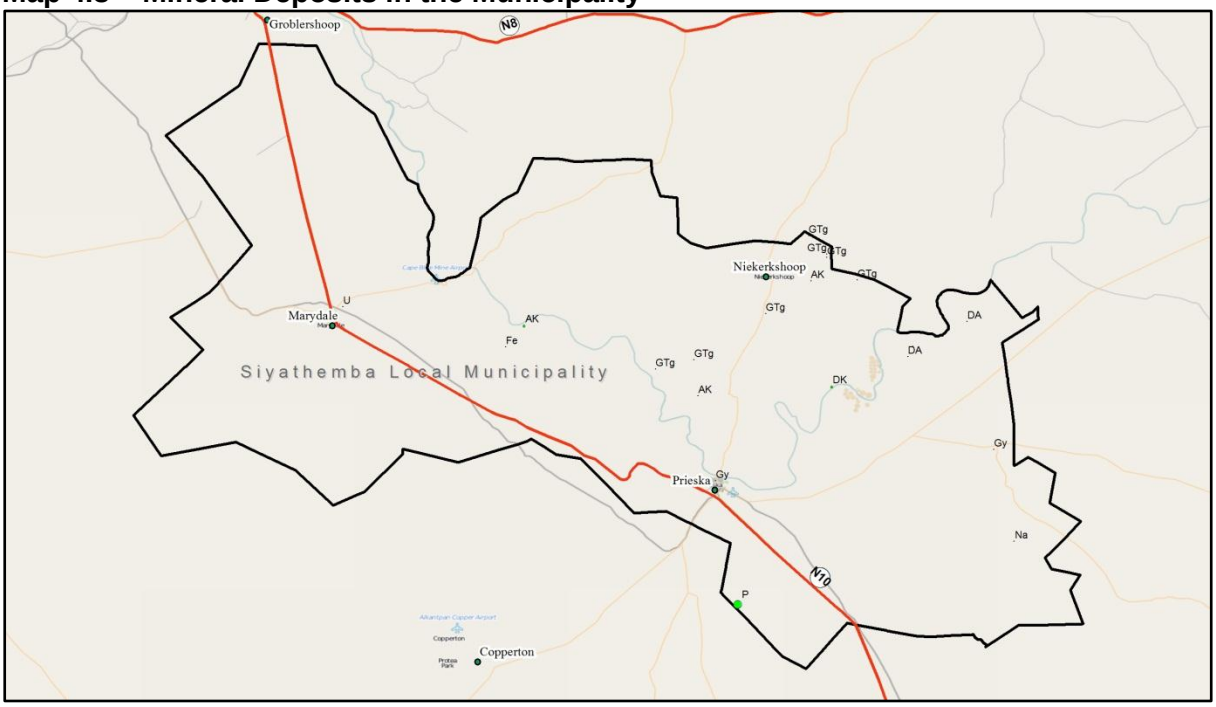
Source: Agricultural Census of 2007 by Statistics South Africa

Although livestock farming does not contribute as much to farming income when compared to crop production, the sale of animals did contribute almost R60 million to local Agriculture. From this total, the sale of sheep was the most significant. During 2007, there were almost 200,000 animals in total on local farms.

Agro-processing also contributed to the local economy during 2007. During this year some 38112 litres of milk and cream were sold, as well as 77,965 kilogram of wool.

Mineral deposits found in the Municipal area are depicted by Map 4.3.

Map 4.3 – Mineral Deposits in the Municipality



Source: Council for Geoscience

From this Map the following observations can be made:

- Generally, the area does not have any significant mineral deposits.
- To the south of Prieska, on the farm Doornfontein, a medium-sized mineral deposit of Phosphate can be found.
- Various small mineral deposits can be found near Niekerkshoop. These include Tiger's-eye and Crocidolite (Asbestos).
- Small deposits of Alluvial Diamonds can be found in the Orange River.
- Other small mineral deposits within the Municipal boundary include Salt, Gypsum, Iron and Uranium.

4.2. Strategic Vision for Local Economic Development

The purpose of this Sub-section is to present the Strategic Development Pillars for the local economy of Siyathemba. The Development Pillars are now presented as the core of the Siyathemba LED Strategy. These "LED drivers" also serve as points of alignment with the relevant development policies.

The goal of LED in the Municipality was packaged (Section1) into the following Vision Statement:

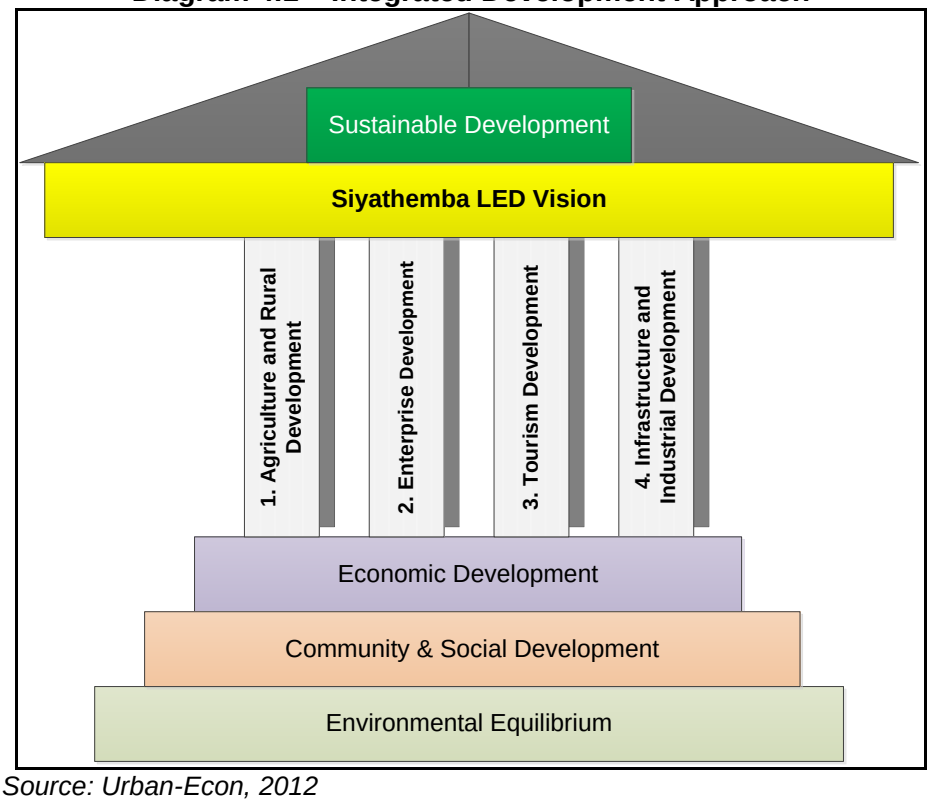
"Ensuring long term economic sustainability through local value addition and social upliftment, as well as integrated community development. We strive towards an economy owned by local people."

This vision sets the tone for the LED Strategy and provides guidance for its Implementation Plan towards a future desired by local communities.

4.2.1. Development Pillars

From a strategic development facilitation point of view, it is necessary to ensure that the appropriate linkages and interactions between projects and actions be established. Such an integrated approach is needed to ensure the optimal rate of implementation and economic development in the area.

Diagram 4.1 – Integrated Development Approach



Source: Urban-Econ, 2012

The integrated approach for stimulating economic growth and development within Siyathemba is illustrated in Diagram 4.1. Based upon this Figure, there are **four main Strategic Development Pillars** for stimulating growth and development within the Siyathemba economy.

These Development Pillars are based on the situation experienced within the Siyathemba local economy and aim to utilise existing strengths and opportunities by transforming these into workable programmes and actions that will assist in reducing threats and alleviate weaknesses in the local economic environment.

4.2.1.1. Pillar 1: Agriculture and Rural Development

There is a growing need to solve a host of problems faced by the Agriculture sector in Siyathemba in a more integrated manner, within the framework of sustainable development. Rural and inclusive development strategies in the past have moved between maximising growth through promoting commercial crops and emphasising food production / self – sufficiency on one hand and import substitution on the other. There are, however, various recommended programmes to improve this sector:

Agribusiness may be defined as all market and private business–oriented entities involved in the production, storage, processing and distribution of agro–based products, in the supply of production inputs and in the provision of services. Agribusiness is an integral component of rural development and forms part of the strategy to improve regional and local economic development and ensure food security.

Agribusiness enterprises are primarily labour-intensive small and medium sized enterprises located near agricultural production sites in rural areas or in rural centres, such as Siyathemba. Economic success of these agricultural enterprises is increasingly determined by the performance and capacity of upstream and downstream sectors. Agribusiness entities need to respond by improving their efficiency and market orientation. What is required in agribusiness is access to expertise, the availability of market information and sufficient management skills.

Agribusiness support in itself must be an integral part of the LED and must be targeted towards the creation of jobs and income in Siyathemba. In line with a common business concept, the guiding principle is always the market orientation of all support services. Employment promotion and poverty alleviation in rural areas are additional goals of promoting agribusiness. Agribusiness does not only focus on the primary production of products, but also requires additional workers. New employment opportunities are created in the processing industry and, especially, in the service sector.

The following Programmes were identified in Siyathemba:

1. Agro-Processing
2. Emerging Farmer Support

4.2.1.2. Pillar 2: Enterprise Development

Enterprise support systems are a critically important aspect of local economic development due to this sector's employment creation characteristics. This Development Pillar's main focus is to establish and expand Enterprise Development in Siyathemba. Thus, the Pillar has a dual aim, including:

- The support of SMMEs (existing and newly emerged).
- The development of new Enterprises

Therefore, the objective of this Pillar is to facilitate the establishment of new enterprises, to provide support during the initiation phases of establishment and to provide sustainable information and support for new and existing enterprises within the Municipal area.

The strategic focus of this Pillar is on the following areas:

- The efficient utilisation of government programmes aimed at Enterprise Development
- Networking and matchmaking
- Development assistance provision to the enterprise sector
- Channelling of information

The following Programme was identified in Siyathemba:

1. Investment Promotion and Development
2. SMME and Entrepreneurial Support

4.2.1.3. PLAN 3: Tourism Development

There are many definitions and descriptions of tourism. While some specialists restrict tourism to trip distances (i.e. over 50 or 100 km from home), others require that a person stay overnight to be counted as a tourist. More traditional definitions include only vacations or pleasure trips. Today, however, the trend is to use tourism and travel as synonymous terms. Probably the best working definition is:

"Tourism is the temporary movement of people to destinations outside their normal places of work and residence, the activities undertaken during their stay in those destinations and the facilities created to cater to their needs."

This broader definition does not only include leisure tourism but also business and even medical tourism.

Tourism products and their foundations are far more perishable than manufactured products. For example, if a manufacturer of gearboxes discovered that the demand for the product has increased in a certain region the manufacturer can supply products to those areas. However, when a new hotel is developed in a region and a large capital investment was made and the travel market decides to go elsewhere, it is costly, if not impossible to move.

The following Programme was identified in Siyathemba:

1. Improving the Tourism Profile

4.2.1.4. PLAN 4: Infrastructure and Industrial Development

The concept of Infrastructure and Industrial Development Promotion, in the case of Siyathemba, refers to the expansion of current business and industrial activities, improved local networking and optimising the use of local resources and assets, such as industrial areas and serviced business properties. Broadly, this implies the attraction of new investment to Siyathemba, retaining existing businesses and industries and encouraging local capital to invest locally.

The Infrastructure and Industrial Development Plan are based upon the creation of a vibrant, diversified and sustainable economic development base for investment in Siyathemba, which includes the mining sector. This, however, requires strong, visionary leadership and cooperation between the various LED role players of Siyathemba to effectively link local and regional opportunities, markets and technology and entrepreneurship to potential investors (also referred to as investment matchmaking). This necessitates the establishment of a

representative and efficient LED Forum in Siyathemba which represents both local government and the private sector.

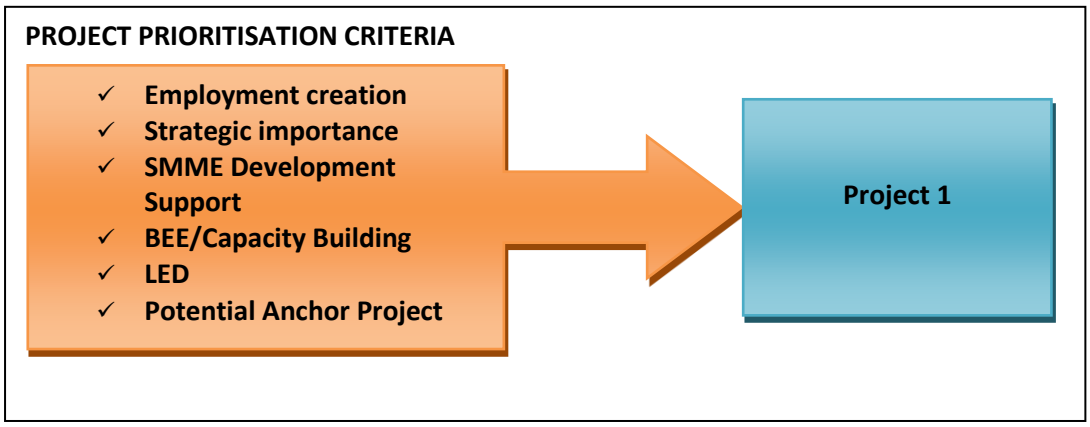
The following Programme was identified in Siyathemba:

1. Industrial Diversification and Infrastructure Development

4.2.2. Project Identification and Prioritisation

In order to determine which of the identified LED projects and initiatives will have the highest impact on the local economy in terms of job creation, capacity building, social upliftment, etc., it is important to prioritise these projects according to a specific set of criteria. This will also facilitate the selection process of strategic anchor projects for Siyathemba. Figure 4.2 indicates the six criteria that are used to prioritise planned projects and other LED initiatives.

Figure 4.2 - Prioritisation criteria



Anchor projects are those projects that consist of a number of linkages to various other sectors and projects. It is important to note that in most instances, anchor projects are also referred to as primary projects, because without the successful implementation of the primary projects, and delivery of primary products there can be no secondary projects, such as processing (value-adding to the product), or trade of the finished product/goods.

The following Pillars, Programmes and Projects have been prioritised accordingly and are indicated in Annexure A:

Pillar 1: Agriculture and Rural Development

Programme 1: Agro-Processing

- Maize & Wheat Mill
- Dairy Processing & Packaging
- Wool Production
- Production of essential oils
- Extensive Irrigation Crop Farming along the Orange River

Programme 2: Emerging Farmer Support

- Mentorship Programme in association with commercial farmers
- Demonstration of new farming methods and technologies
- Establishment of an agricultural college in near Prieska

- Availing farm land for emerging farmers
- Goat meat processing and packaging

Pillar 2: Enterprise Development
Programme 1: Investment Promotion and Development

- Development of serviced business plots for retail and industrial development (especially in Prieska)
- New small grocery shop and restaurant development
- Construction equipment sales and rental

Programme 2: SMME and Entrepreneurial Support

- SMME Training Centre
- Availing suitable business plots for informal traders
- Development and implementation of appropriate town planning regulations for small businesses in the area

Pillar 3: Tourism Development

Programme 1: Improving the Tourism Profile

- Resort and adventure tourism along the Orange River
- New Casino Development (Prieska)
- Game Reserve Development
- The development of an annual festival at “Die Koppie” or "Die Bos"

Pillar 4: Infrastructure and Industrial Development

Programme 1: Industrial Diversification and Infrastructure Development

- Local Recycling Plant (paper, plastic and glass).
- Brick Manufacturing Plant
- Semi-precious stones beneficiation hub
- Building sand quarry
- A local Gemstone Beneficiation Plant
- The processing of salt

4.3. Policy Alignment

In recent years there has been a major thrust to establish developmental state through a reform of the country’s government system. It is by now a norm that local government has a critical role to play in re-building local communities and environments as the basis for promoting effective service delivery, the creation of integrated cities, towns and rural areas as well as the promotion of local economic development.

Coupled to this, a significant number of policy and legislative measures have been adopted in order to facilitate the creation of developmental government and an efficient and integrated planning and development systems.

4.3.1. New Growth Path

The New Growth Path's (2010) main focus areas are to create decent work opportunities, reducing inequality and to end poverty in South Africa. Government aims to achieve this through a New Growth Path founded on a restructuring of the South African economy to achieve labour absorption and a steady economic growth rate. Government is committed to forging such a consensus and leading the way by:

1. Identifying areas where employment creation is possible on a large scale as a result of substantial changes in conditions in South Africa and globally.
2. Developing a policy package to facilitate employment creation in these areas, through:
    a. A comprehensive drive to enhance both social equity and competitiveness;
    b. Systemic changes to mobilise domestic investment around activities that can create sustainable employment; and
    c. Strong social dialogue to focus all stakeholders on encouraging growth in employment-creating activities.

The New National growth Path incorporates the Industrial Policy Acton Plan (IPAP2) and various other policies, programmes and strategies. The aim of the New Growth Path is to ultimately create a more developed, democratic, cohesive and equitable economy and society in South Africa.

Achieving the New Growth Path requires that certain key trade-offs' be addressed. This will put emphasis on government's prioritisation to support employment creation, equity and the directions business must move to facilitate a growing economy.
Some key trade-offs include:

1. Between present consumption and future growth, since that requires higher investment and saving in the present;
2. Between the needs of different industries for infrastructure, skills and other interventions;
3. Between policies that promise high benefits but also entail substantial risks, and policies that are less transformative and dynamic but are also less likely to have unintended consequences;
4. Between a competitive currency that supports growth in production, employment and exports and a stronger rand that makes imports of capital and consumer goods cheaper; and between the present costs and future benefits of a green economy.

Implications of the New Growth Path

Achieving enhanced economic growth and to create new employment opportunities in the Municipality will be the main implication of the New Economic Growth Path. This will be accomplished in the Municipality through:

1. Enhancing social equity
2. Encouraging competitiveness
3. Mobilising domestic investment
4. Stakeholder participation

The New Growth Path will especially be applicable in the following key areas in the Municipality:

1. Agriculture and agro processing
2. Trade and Business
3. Tourism

4.3.2. The Industrial Policy Action Plan (IPAP2)

The major weakness identified in South Africa's long-term industrialisation process is that the decline in the share of employment in the traditional tradable sectors, particularly mining and agriculture, has not been offset by a sufficiently large increase in the share of relatively labour-intensive employment in non-traditional tradable goods and services, particularly manufacturing. Consequently, the objectives of the IPAP2 are:

1. To facilitate a shift away from reliance on traditional commodities and non-tradable services and promote value-added goods and services that compete in export markets (against imports).
2. To intensify the industrialisation process and move towards a knowledge-rich economy.
3. To promote a more labour-absorbing industrialisation path, with particular emphasis on tradable labour-absorbing goods and services and economic linkages that enhance employment creation.
4. To promote a broader-based industrialisation path characterised by increased participation of historically disadvantaged people and marginalised regions in the mainstream of the industrial economy.
5. To contribute to the industrial development of the African continent, with emphasis on building productive capabilities.

Implications of IPAP2

IPAP2 prioritise certain industrial sectors that have played an important role in economic development in various parts of South Africa. These sectors include:

1. Capital/Transport equipment and metals fabrication
2. Chemicals, plastic fabrication, and pharmaceuticals

In addition, IPAP2 envisages to fast track implementation through:

1. Maintaining momentum in the implementation of the ASGISA's prioritised sectors of Business Process Outsourcing and off shoring (BPO&O), as well as tourism and bio-fuels.
2. Implementing other substantive sector projects in diamond beneficiation and jewellery, agro-processing, film and crafts.
3. Developing strategies for sectors of mining and mineral beneficiation, agriculture, ICT (services and products), as well as creative industries.

4.3.3. The Comprehensive Rural Development Programme

The Comprehensive Rural Development Programme is a national collective strategy to fight poverty, hunger, unemployment and lack of development in rural areas. It was launched in August 2009 by President Jacob Zuma at Muyexe Village, Limpopo.

Government has pledged over R2.6 billion in conditional grants to provinces over the medium term. This will be used for agricultural infrastructure, training, advisory services and marketing, and for upgrading agricultural colleges. One of the priorities is to ensure that land reform, through redistribution and restitution, is more coherently linked to the creation of livelihoods for the poor.

A critical part of the Rural Development Programme is to stimulate agricultural production to contribute to food security. Government will support the provision of agricultural implements and input to support emerging farmers and households nationally, also making agricultural loans accessible and ensuring agricultural extension services of high quality. As part of the Rural Development Programme, government will also support initiatives that promote other forms of economic potential, including tourism, light manufacturing and cultural work.

The programme is expected to ensure the delivery of clean water, decent shelter, proper sanitation and enterprise-development support.

Implications of the Comprehensive Rural Development Programme

This Comprehensive Rural Development Programme is a very important document concerning the implementation of a Local Economic Development Strategy. The decentralised nature of the strategy implies that the Municipality is responsible for catalysing the transformation of local areas into economically viable communities. To facilitate positive change requires an in depth understanding of local rural areas, along with an excellent relationship with local business and communities.

4.3.4. The National Framework for Local Economic Development by CoGTA

The Framework intends to build a shared understanding of LED in South Africa and put into context the role of local economies in the national economy. It seeks to mobilise local people and local resources in an effort to fight poverty.

The focus of the Framework is upon:

1. Improving the competitiveness of the 52 District and Metropolitan municipal regions in South Africa by providing an approach to developing local economies with the participation of all relevant stakeholders.
2. Rendering economic growth compatible with social equity and safeguarding the environment.
3. What the state can do to support and reward citizens who organise locally and operate in local level partnerships to engage in greater economic activity, spreading economic activity in an even manner.
4. How the state can be a platform to facilitate the inclusion of all to participate in the economy.

Implications of the Framework for Local Economic Development

The Framework for Local Economic Development sets out the following three key roles, which local government can play in the Local Economic Development process:

1. To provide leadership and direction in policy-making.
2. To administer policy, programmes and projects.
3. To be the main initiator of economic development programmes through public spending, regulatory powers and the promotion of industrial- and small business development, social enterprises and co-operatives.

4.3.5. Northern Cape Provincial Growth and Development Strategy

Planning for the promotion of economic growth and social development lies at the core of government's responsibility to provide a better life for all. It is essential to ensure that planning is integrated across disciplines, co-ordinated within and between different planning jurisdictions, and aligned with the budgeting processes of national, provincial, and local governments.

The NCPGDS sets the tone for development planning and outlines the strategic planning direction in the Province. The main objectives set by the NCPGDS for development planning in the Province are:

1. Promoting the growth, diversification and transformation of the provincial economy
2. Poverty reduction through social development
3. Developing requisite levels of human and social capital
4. Improving the efficiency and effectiveness of governance and other development institutions
5. Enhancing infrastructure for economic growth and social development

The development targets for the Northern Cape Province identified by the Provincial Growth and Development Strategy (PGDS) are:

1. To maintain an average annual economic growth rate of between 4% and 6%
2. To halve the unemployment rate by 2014
3. To reduce the number of households living in poverty by 5% per annum
4. To improve the literacy rate by 50% by 2014
5. To reduce infant mortality by two thirds by 2014
6. To reduce maternal mortality by two thirds by 2014
7. To provide shelter for all by 2014
8. To provide clean water to all by 2009
9. To provide access to adequate sanitation to all by 2009
10. To reduce crime by 10% by 2014
11. To stabilize the prevalence rate of HIV and AIDS and begin the reverse by 2014
12. To redistribute 30% of productive agricultural land to PDIs by 2015
13. To conserve and protect 6,5% of our valuable biodiversity by 2014, and
14. To provide adequate infrastructure for economic growth and development by 2014

4.3.6. Northern Cape Provincial Local Economic Development Strategy

The Northern Cape government has embarked on a process of compiling a Provincial Local Economic Development Strategy (LED) at the beginning of 2009 to address the challenges presented by poverty and unemployment in the Province. The provincial government of the Northern Cape has specific coordination and facilitation responsibilities, which need to be addressed in an innovative manner to initiate and promote integrated and sustainable LED, as well as to attract investment. The following broad opportunity themes were identified for the Northern Cape:

1. Agricultural Production
    a. Game farming
    b. Livestock farming
    c. Crop farming
    d. Exotic and citrus fruit
    e. Mari-culture production

2. Mining Production
    a. Exploration of new/additional mineral locations
    b. Geotechnical assessment of economic feasibility

3. Manufacturing
    a. Agro-processing
    b. Mining beneficiation

4. SMME and Trade Support
    a. Training, Mentorship and Skills Development
    b. Information and Support Services

5. Investment in Infrastructure and Technology
    a. Agro-processing infrastructure
    b. Infrastructure necessary for investment in mining
    c. Infrastructure necessary for investment in tourism
    d. Infrastructure provision and delineation of industrial parks, hubs, IDZs
    e. Infrastructure investment needed for high-technology projects such SALT and the SKA
    f. Infrastructure investment in areas of retail business growth
    g. Investment in specialised technologies

6. Tourism
    a. Game hunting
    b. Eco-tourism
    c. Mining/Geological tourism (including exhibitions and festivals)
    d. Adventure tourism
    e. Agro-tourism (such as wine production and tasting)
    f. Tourism routes
    g. Cultural and heritage tourism
    h. Science tourism (such as group tours to SALT

Implications of the Northern Cape PGDS and LED Strategy

The Northern Cape PGDS and LED Strategy notes the fact that each District in the Province has its own regional potential development potential and the Municipality should relate planning frameworks in line with the objectives of the strategies. The main implications are:

1. Undertaking rigorous analysis of the space economy to identify areas of economic significance with a view on focusing government investment and development interventions to ensure maximum and sustainable impact.
2. Capitalising on complementarities and facilitating consistent and focused decision making by providing a common platform for structured dialogue.
3. Moving beyond mere focusing on integration and coordination procedures to establishing processes and mechanisms to bring about strategic coordination, interaction and alignment within government.

In terms of development policy in the Northern Cape, the following priority growth sectors have been identified:

1. Agriculture & Agro-processing
2. Tourism
3. Fishing and Mariculture
4. Energy
5. Mining and Mineral Beneficiation
6. Services
7. BPO & ICT
8. Manufacturing
9. Science
10. Transport

4.3.7. Implications for Siyathemba

Considering the policy alignment of the Siyathemba LED Strategy with relevant policies and strategies that linked directly with Local Economic Development in the region, the economic development Pillars has to be aligned with the relevant policies:

1. Agriculture and Rural Development
2. Enterprise Development
3. Tourism Development
4. Infrastructure and Industrial Development

Diagram 4.2 indicates the alignment of the various economic development Programmes to the various policy and strategies.

Diagram 4.2- Policy Alignment

Programme	Policy Alignment
1. Agriculture and Rural Development	• New Growth Path • The Comprehensive Rural Development Programme • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy
2. Enterprise Development	• New Growth Path • The National Framework for Local Economic Development by CoGTA • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy
3. Tourism Development	• New Growth Path • The Comprehensive Rural Development Programme • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy

Programme	Policy Alignment
4. Infrastructure and Industrial Development	• New Growth Path • The Industrial Policy Action Plan (IPAP2) • The National Framework for Local Economic Development by CoGTA • Northern Cape Provincial Growth and Development Strategy • Northern Cape Provincial Local Economic Development Strategy

SECTION 5: Strategy

This Section presents the Strategy constituting the Strategic Pillars, Programmes and Projects. These Strategic Pillars are based on the situation experienced within the local economy of Siyathemba and aim to utilise existing strengths and opportunities by transforming these into workable programmes and actions that will assist in reducing threats and alleviate the weaknesses in the local economic environment. The Strategic Pillars are supported via the development of programmes that aim to enable the specific sectors. Distinct actions are formulated in order to reach the targets of each programme.

5.1. Economic Development

Programmes have been developed to support the various Pillars. Distinct projects are formulated with explicit actions in order to reach the targets of each programme. Table 5.1 indicates the various Pillars, Programmes and Projects Identified for the Siyathemba LED Strategy.

Table 5.1 – Project Pillars and Programmes

Pillar	Programme	Project
Agriculture and Rural Development	1. Agro-Processing	• Maize & Wheat Mill • Dairy Processing & Packaging • Wool Production • Production of essential oils • Extensive Irrigation Crop Farming along the Orange River
	2. Emerging Farmer Support	• Mentorship Programme in association with commercial farmers • Demonstration of new farming methods and technologies • Establishment of an agricultural college in near Prieska • Availing farm land for emerging farmers • Goat meat processing and packaging

Pillar	Programme	Project
Enterprise Development	1. Investment Promotion and Development	• Development of serviced business plots for retail and industrial development (especially in Prieska) • New small grocery shop and restaurant development • Construction equipment sales and rental
	2. SMME and Entrepreneurial Support	• SMME Training Centre • Availing suitable business plots for informal traders • Development and implementation of appropriate town planning regulations for small businesses in the area
Tourism Development	1. Improving the Tourism Profile	• Resort and adventure tourism along the Orange River • New Casino Development (Prieska) • Game Reserve Development • The development of an annual festival at “Die Koppie” or "Die Bos"
Infrastructure and Industrial Development and facilitation	1. Industrial Diversification and Infrastructure Development	• Local Recycling Plant (paper, plastic and glass). • Brick Manufacturing Plant • Semi-precious stones beneficiation hub • Building sand quarry • A local Gemstone Beneficiation Plant • The processing of salt

5.2. Institutional Development

Siyathemba's commitment to Local Economic development must be facilitated through a dedicated administration and bureaucracy. This means that the Municipality's institutional structure must be configured in such a way that it supports LED and that the whole institution is geared towards integrated planning and implementation.

5.2.1. The Siyathemba Institutional Structure

Towards the end of making informed recommendations for implementing the LED Strategy from an institutional perspective, it is important to outline the main objectives of the Strategy to inform the Municipality's organisational structure. These objectives are:

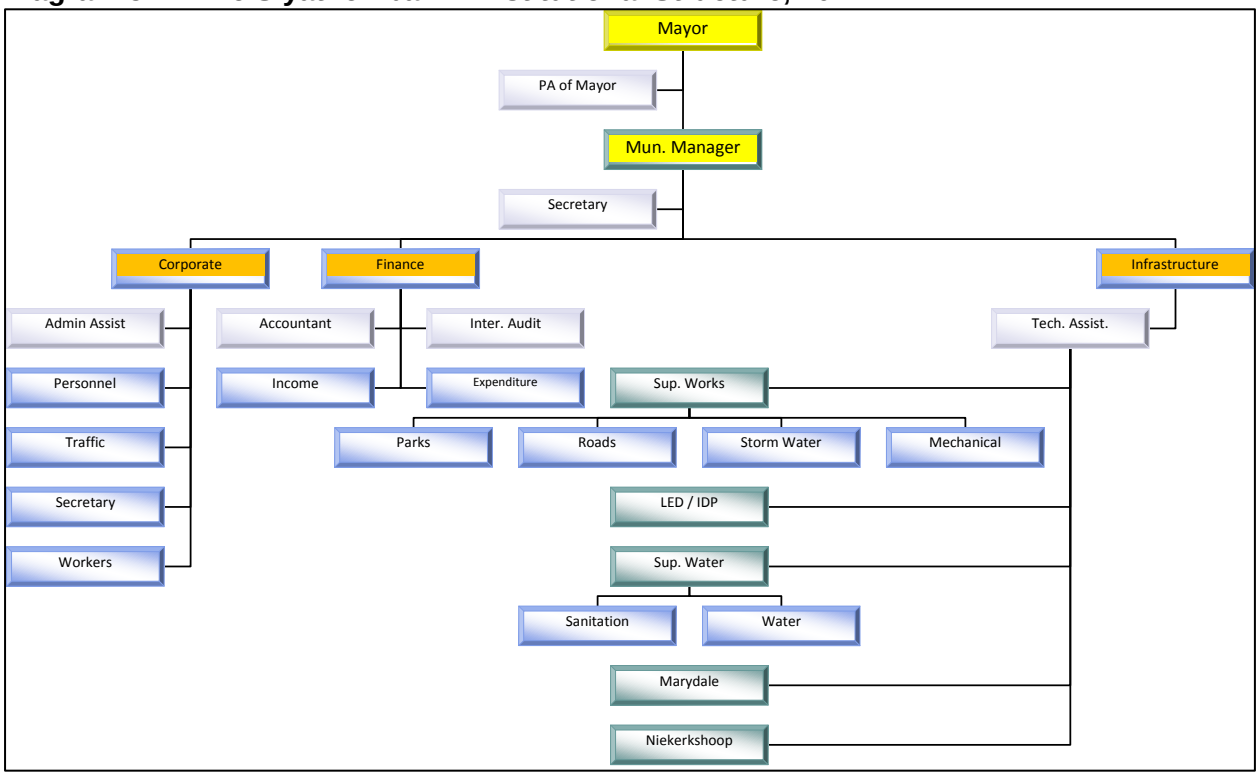
1. To facilitate and promote employment creation and poverty alleviation among local communities.
2. To promote internal and external investment into the local economy that would promote the growth of existing businesses, as well as the establishment of new businesses.
3. To ensure that local entrepreneurs and SMMEs are provided with the necessary support to establish and grow their businesses.
4. To implement strategies, programmes and projects that would create an environment conducive to investment and business growth.
5. To engage and interact with potential private sector investors.
6. To actively promote and market the local area to internal and external investors, in terms of local investment opportunities, planned infrastructure developments by the Municipality and development by other private investors.
7. To investigate approaches for lowering the cost of doing business in the area, as well as possible investment incentives aimed at strategic locations and economic sectors (such as Agriculture & Tourism).
8. To plan for, evaluate, manage and implement LED programmes as a coordinated effort between the Directorates of the Municipality and other role players.
9. To spearhead and drive community interaction, participation and buy-in of LED initiatives in local communities.
10. To act as the guardian of local people by ensuring that LED initiatives benefit them and that LED implementation occurs in such a way that labour intensive methods are applied.
11. To facilitate local access to and taking full advantage of LED and other development support programmes and funding sources provided by government, the private sector and other institutions (such as DTI & IDC programmes and venture capital).

More specifically, the Municipal IDP (2011/12) set the following criteria that should be considered in order for the municipality to have a credible LED Strategy:

- Effective and efficient service delivery.
- Optimal human and natural resource development and utilization.
- Local economic development and job creation.
- A vibrant tourism industry.
- A healthy HIV/Aids-free and secure community.
- A community friendly environment.

The institutional structure of the Siyathemba Local Municipality is illustrated by Diagram 5.1.

Diagram 5.1 - The Siyathemba LM Institutional Structure, 2012



Source: Siyathemba Municipal Integrated Development Plan, 2011-12

From this Diagram, the following observations can be made:

1. There are three Directorates on equal footing under the management of the office of the Municipal Manager in the structure.
2. The LED Function has not been designated as one of these Directorates but placed under the Infrastructure Directorate.
3. There does not seem to be any direct reporting linkages between LED and the office of the Municipal Manager.
4. Most of the Municipal structure is dedicated to issues relating to administration followed by traditional town planning services (such as water, electricity, refuse removal etc.)

5.2.2. Institutional Recommendations for LED

Due to the high levels of poverty, the concentrated nature of the local economy and the growing unemployment rate, it is strongly recommended that a LED Directorate be established that reports directly to the office of the Municipal Manager.

Diagram 5.2 – Recommended Institutional Structure for the LED Directorate

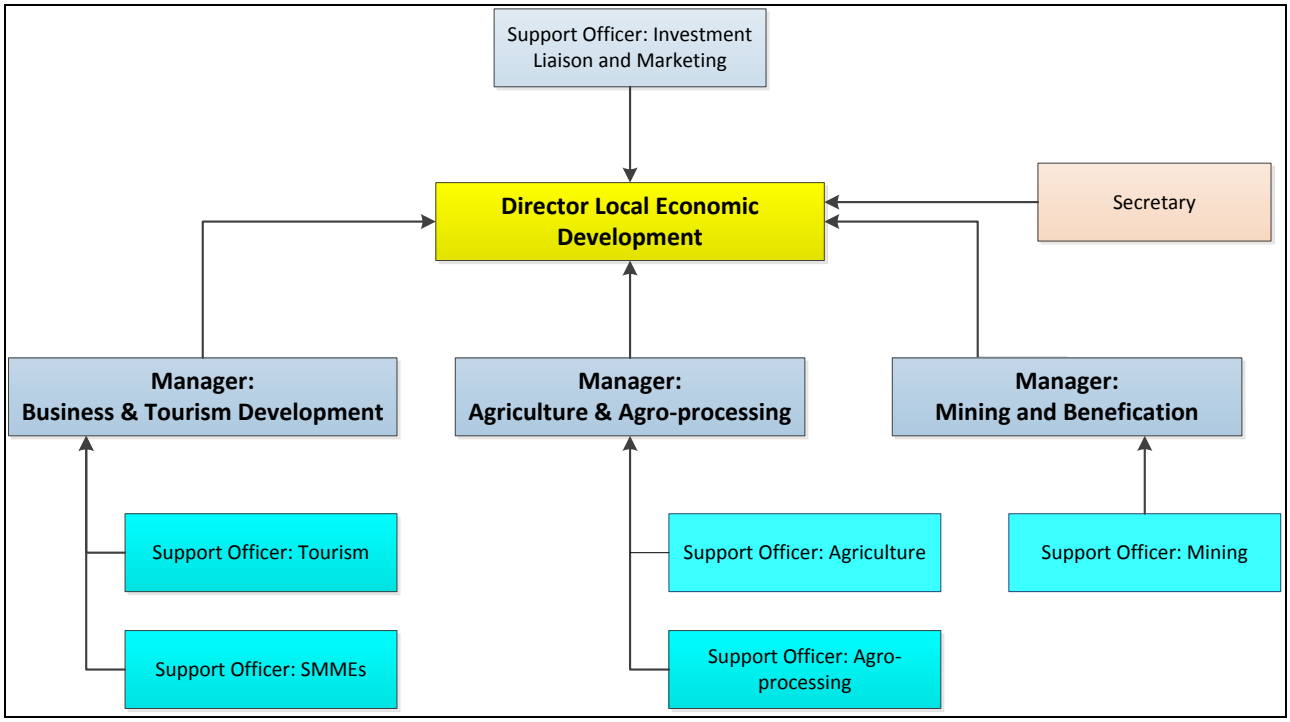


Diagram 5.2 illustrates the recommended institutional structure for the LED Directorate, in line with the LED Strategy Objectives as well as the IDP's LED Targets and Programmes (2011/12). This structure is deemed to be appropriate to drive and manage the LED functions of the Municipality due to the following reasons:

- The Structure aligns with the LED development objectives, targets and programmes and is therefore geared towards implementation.
- The Structure has been streamlined to promote cooperative planning and integration within the broader Municipal structure.
- The Structure makes provision for hands-on management backed up by the necessary support.
- The Structure allows for clear and predictable performance monitoring of the LED Directorate, as well as the officials assigned to it.
- The Structure allows for Investment Marketing which is seen as a vital part of the LED Strategy.
- The Structure is organised in such a way that it allows for the monitoring of business growth and employment trends associated with the objectives of the LED Strategy.

SECTION 6: Implementation Plan

This Section presents the Implementation and Action Plan for the Siyathemba LED. The actual implementation of the specified Pillars and development programmes is vitally important and should be regarded as of the utmost importance. While individual wealth and employment creation projects have been formulated for Siyathemba, the deployment of the LED strategy (i.e. the various Pillars and their respective development programmes), is central to the successful placement of the Municipality on a higher economic growth path.

This Section builds on the Potential Analysis and the LED Development Framework, and serves as a basis for implementation.

6.1. Strategy Implementation

To facilitate successful strategy implementation, it is necessary to outline an implementation framework tailored to the Siyathemba LED Development Framework. This implementation framework is based on the development Pillars and programmes identified in Section 3 & 4. The implementation framework reflect the key strategic focal points of implementation specifically with regards to small and agro business development, increasing the marketing and tourism sector, agricultural development and emerging farmer support, rural and community development and BEE empowerment. The framework is presented under the following headings:

1. Investment in business development and diversification.
2. Further unlocking the potential of the Primary sector and beneficiation.
3. Improve the capacity and resources of the Municipality.
4. Managing innovation.
5. Incubators and Cooperatives as a platform for LED implementation.
6. The road to unlocking private sector investment.

6.1.1. Investment in business development and diversification

The Development Framework underlines the importance of attracting new businesses/industries and expanding existing ones in Siyathemba.

Business diversification is important to sustainable economic development in Siyathemba because of high levels of unemployment and poverty. There are numerous examples globally where economies that focused solely on one specific industry sector paid a severe price upon the eventual decline of the industry (also known as the “all the eggs in one basket” scenario). The local Agriculture sector certainly fits that scenario. Siyathemba must prove extremely visionary in promoting economic diversification. In addition, Siyathemba must make sure that it has created an environment that will be supportive of domestic and international business investment. An added value of economic diversification is that it can possibly lead to the creation of and support for the development of BEE orientated SMMEs. Any effort to support SMMEs would be consisted with national, provincial, and municipal economic goals and objectives.

6.1.2. Further unlocking the potential of the Primary sector and beneficiation

Agriculture has long been an economic driver in Siyathemba. The concept of further unlocking the potential of agriculture is based on the beneficiation or value addition to raw produce from the area, rather than exporting these raw products at a low cost and deriving no benefit from value adding processes. In many respects the process of value addition of such products is more aligned to manufacturing in nature than to agriculture. There is no reason why the processing, packaging and distribution should not take place in Siyathemba. In this way the same raw material would generate more employment opportunities and wealth in the local communities where it is needed most.

In a similar way agricultural products can be processed further, value added, and exported from Siyathemba to the rest of the world. The beneficiation of suitable products would create many additional employment opportunities in the area and would significantly increase local economic growth. A process needs to be established to identify suitable opportunities that can be fully exploited to the benefit of the local population. An agro-business incubator or joint venture with local commercial farmers could create a suitable environment for this to happen. Sophisticated skills will be required to ensure that the proposed business ideas succeed.

6.1.3. Improve the capacity and resources of the Municipality

The development of Siyathemba will be significantly influenced by the ability and the capacity of the Local Municipality to manage and finance the LED Strategy. Many of the officials do not have extensive experience in Local Economic Development. They are also not familiar with dealing with the private sector in respect of large capital investments.

It is essential that the capacity of the responsible officials be improved where and when necessary. What is proposed here is thus the design and implementation of long-term capacity building initiatives coupled with formal training and development by recognised institutions.

6.1.4. Managing innovation

The process of managing innovation is in essence how one increases the translation of LED Opportunities to reality. The frequency and velocity of the process in Siyathemba will translate directly to economic growth and the creation of sustainable job opportunities. The development of a process that promotes a broad array of project ideas is an important element of a competitive strategy. Included in this process should be a means to assess the project ideas and match those that are deemed worthy with prospective funders. Siyathemba must be in a position to promote a free flow of new ideas and talents to address high priority issues related to sustainable economic development in the area.

Ideally, the Siyathemba LED forum should consist of a small group of core stakeholders and role players representing diverse interest in the area. This group must be charged with the task of addressing community priorities by receiving and reviewing ideas from any community member or would-be entrepreneur. The ideas received by the LED Steering Committee must then be reviewed in terms of criteria and development potential. Those ideas or projects that are deemed feasible can then be nominated for development facilitation and funding.

Projects or ideas approved by the LED Steering Committee should be subjected to feasibility studies for detailed scrutiny and evaluation. Once this process has been completed the project is presented for development facilitation (if necessary), funding and implementation.

The type of development facilitation and the implementation of the project will have to be determined on an individual basis. The main advantage of this process is that it encourages those most directly involved in sustainable economic development issues to set aside traditional rules and regulations and think "outside of the box". Its application by Siyathemba may prove extremely relevant in efforts to develop innovative economic development initiatives, which are community based and rooted.

6.1.5. Incubators and Cooperatives as a platform for LED implementation

A cooperative is a voluntary organisation formed by a group of people who have a common need that they want to address jointly, or a group of people who want to create employment for them[4].

A Cooperative means an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically – controlled enterprise organised and operated on co-operative principles[5].

Cooperative Principles:

1. Voluntary membership.
2. Democratic member control.
3. Member economic participation.
4. Autonomy and Independence.
5. Education, Training and Information.
6. Co-operation with other co-operatives.
7. Concern for members of the community.

These Principles inform the design of cooperative business models.

The formation of cooperatives as a method of development facilitation and project implementation is well known in South Africa. The concept is based on the idea of sharing resources and knowledge. A group of emerging farmers might for example decide to pool their resources to the benefit of the entire group. This group would then typically organise themselves into a cooperative. As a cooperative they are then able to purchase the necessary inputs such as farm implements that where too expensive for the farmers to buy individually. The cooperative will then also assume responsibility for marketing and managing the produce. As an application of development facilitation, emerging farmers can go into a cooperative agreement with an established commercial farmer. This works especially well if a Municipality or other institution (e.g. the Land Bank) assists the group of emerging farmers to acquire land and start-up capital. Under the mentorship of the commercial farmer, these emerging farmers can then become financially viable farmers in their own right under the cooperative agreement.

The primary objective of development incubators is to fast-track LED in a practical and proven manner. The primary goal of incubators is to facilitate economic growth in certain industries, job creation and investment attraction. An appropriate definition of an incubator is an organization that has the technical and financial capability to establish and grow businesses in a competitive environment. The entity must be able to establish and float independent and sustainable businesses effectively. Further, the incubator is expected to become a self-sustaining profit and investment centre over time. If correctly applied, incubators can breathe new life and vitality into the economy of Siyathemba.

[4] dti Co-operatives Handbook
[5] Co-operatives Act

Incubators are a mechanism for identification and development of entrepreneurs. They also provide a platform for focused government intervention through subsidy arrangements. They can improve the level of accountability and effectiveness of Government support. They can reduce the leakage that may occur in a government support programme because of the nature of the monitoring system and accountability inherent in a well-run incubator.

In Siyathemba the focus of incubators will be on the implementation of specific key programmes or projects. An incubator will typically be used to achieve the goals and objectives of a specific project. The purpose of an incubator will not be to assist as many entrepreneurs as possible or process as many trainees as possible. The very essence of an incubator is to select those entrepreneurs, which will contribute to the successful implementation of the LED Strategy.

Incubators provide assistance with mentoring, business development, marketing and securing access to finance. In addition, one of the most important functions is information dissemination and establishing linkages between the entrepreneurs and the private sector and government. Incubators must be viable, need to operate as a business, have their own source of sustainability, generate wealth, and fulfil the needs of the community to the greatest extent possible.

There are a number of criteria, policy and other issues, which need to be addressed in incubator development. These criteria include:

- Selectivity
- Accountability
- Accessibility to capital
- Qualified mentoring,
- Creation of synergy
- Industry knowledge
- Business and management

Incubators are in essence, designed to serve as a mechanism for generating new businesses, which in time will help alleviate poverty.

6.1.6. The road to unlocking private sector investment

It is important that the Siyathemba LM develops the skills and orientation that will enable it to facilitate and attract private sector investment. The starting point is to take responsibility, then to put the systems in place to execute that responsibility. The process of developing the capacity to respond effectively to this challenge is outside the scope of this LED Strategy document. However, below is a set of some of the critical matters that should be attended to in the operations of the Pixley ka Seme LM going forward.

Many governments, in their efforts to fast forward the developmental process, sometimes sidestep elements that are crucial to project sustainability. Pressures to deliver much needed basic services in response to community expectations and national government mandates such as Integrated Development Planning (IDP) and Local Economic Development (LED) also provide incentives for Municipalities and Provincial Governments to quicken the pace of delivery.

International development experience in countries throughout the world has indicated that millions, if not billions, have been wasted because of the unwillingness of governments to take the necessary precautions in project design, development, and subsequent implementation. While much has been said about the need of governments to focus on socio-economic development, much more needs to be said about the definition of a systematic process leading to it. The process involves the infusion of business policies, principles, and practices into socio-economic development planning.

Specifically, there are a number of steps that should be implemented by government to support sustainable development and economic investment. Simply put, a developmental project should involve much more than the construction of houses, provision of water and electricity, or the installation of bulk infrastructure.

Rather a developmental project should be premised on the following:

1. Pre-feasibility Study
2. Feasibility Study
3. Business Development Plan
4. Capital Raising

Why a pre-feasibility study? The pre-feasibility study is the most common and the most resource intensive of preliminary project preparation options. A pre-feasibility study is a precursor to a feasibility design study. Its main purpose is to ensure there is a solid basis for undertaking a feasibility design study. A pre-feasibility study is the investigation that normally precedes a decision to go forward with a given project proposal. The principal objectives of a pre-feasibility study are the following:

- Undertake a detailed analysis of the development situation and constraints the project is to address, and to identify government partner policies, programs and projects designed to address these constraints (including activities of other donors).
- Refine the logical framework matrix (based on collection of sound, objective data) and project proposal in a clear and realistic manner and make a preliminary assessment of the viability of alternative approaches.
- Identify and define the linkages between the project and poverty reduction, taking into account the findings of a poverty analysis.
- Define achievable outcomes for the project or define possible design options or concepts that may merit further investigation.
- Make a preliminary identification of the likely risks to achieving the objectives and to achieving sustainability after project completion, and assess the importance of these risks (i.e. preliminary risk analysis and sustainability analysis).
- Develop a terms of reference for a feasibility design study if this is deemed appropriate.
- Define further data collection and analysis requirements, and possible data sources, for the feasibility/design stage.

The pre-feasibility option is used if any one of the following is true:

1. There is a serious lack of information on the development problems to be addressed by the project and this needs fuller definition through an analysis by technical specialists before a feasibility study can be undertaken.

2. There is insufficient information to prepare the terms of reference for a feasibility design study.

Why Feasibility Study? A feasibility study is a combination of a market study and an economic analysis that provides an investor with knowledge of both the environment where a project will exists and the expected rate of return on investment to be derived from it. In sum, it is an investigation, which tries to clearly establish whether a project will work and achieve its expected results. A feasibility study is defined as an evaluation or analysis of the potential impact of a proposed project or program. It is conducted to assist decision makers in determining whether or not to implement a particular project or program.

Such a study usually evaluates in detail a project's technical design, its costs and benefits, economic feasibility, social and environmental aspects, institutional issues, financial aspects, public opinion, and analysis of alternative selection. The extensive research, conducted in a non-biased manner, will provide data upon which to base a decision. Feasibility studies are usually carried out in the preparation stage of the project cycle.

The components of a feasibility study include the following:

- Executive Summary: The executive summary provides an overview of the feasibility study and should include major findings of the study followed by a recommendation.

- Background Information: Some background information is critical to provide context for the feasibility study. The information should include: a summary of the community to be impacted (for example: number of community residents, geographical size of the community), summary of the related types of services currently being provided to the community, mission of local government in relation to the proposed project, goals and objectives of the government in relation to the proposed project, socio-economic trends that might impact the community (for example, recent and projected growth, skills, financial status); and the reason and rationale for the proposed project.

- Discussion of the proposed project: This portion of the feasibility study should outline the main characteristics of the proposed project. A description of the processes involved in the proposed project should also be included.

- Advantages and Disadvantages of the Proposed Project: The advantages and disadvantages of the proposed project need to be clearly explained in the feasibility study. Not only should potential gains be discussed, but also decision-makers need to know possible disadvantages of the proposed project. It is better to have the potential disadvantages described so that there will be no big surprises when the proposed project is implemented. Knowing the potential disadvantages also help the decision-makers to be realistic and determine ahead of time what they are willing to accept.

- Project Schedule: A "best guess" schedule for the project should be included as part of the feasibility study. Realistic dates for each phase of the project must be included; however, there are often delays during project implementation, particularly one with a major construction component.

- Final Recommendation: A final recommendation is provided in the feasibility study based on the research conducted. The recommendation includes the rationale and financial evidence that supports it.

In sum, a feasibility study provides local government officials with a very detailed assessment of what the best alternative in response to highest priority community needs. The feasibility study also serves a source of unbiased justification for moving forward with the implementation of a proposed project.

Why A Business Development Plan? A business plan is a comprehensive planning document, which clearly describes the business developmental objective of an existing or proposed business. The document describes the proposal's concept, the market problem, proposed solutions, business and revenue models, marketing strategy, technology, company profile, as well as financial data for coming years. It seeks to capture the vision, current status, expected needs, defined markets, and projected results. It also maps the marketing and organisational strategies that will enable the organisation to achieve its goals.

Many Local and Provincial Governments in South Africa have developed business plans, which reflect their overall developmental goals and objectives. It is equally important however for each proposed project to have a business plan. The business plan should contain information that exists in the feasibility study. It should however, provide a clear road map of the proposed project and all of its implications.

The business plan should include the following:

- Mission statement
- Identification of goals and objectives
- Statement of Purpose
- Description of the Proposed Project
- Background information about the location and beneficiaries
- Market Strategy
- Management and Human Resources
- Expected Effect of the Proposed Project
- Strategic Implementation Timeline
- Summary
- Monitoring and Evaluation Plan
- Financials

In sum, a business plan for a proposed project should greatly increase the ability of government officials to effectively manage, monitor, and evaluate its implementation. The business plan should serve as the principal source of guidance regarding the implementation of a project.

Why Capital Raising? Perhaps one of the most limiting factors affecting any developmental project is the raising of capital. From international donors to the Municipality, which have funds to support developmental project initiatives, the amount of funds available is usually problematic. Local governments in South Africa are also looking more and more to private institutions to help finance developmental projects.

In raising capital to support developmental projects, Siyathemba must make sure that the projects are viable, sustainable, and to the greatest extent possible and will ultimately pay for themselves. It is understood that the Siyathemba Municipality is facing budget challenges. For the Municipality to gain more access to private capital, officials must indicate their willingness and ability to apply strict fiscal management to their budgetary process. Fiscal accountability is critical to any government's efforts to raise capital.

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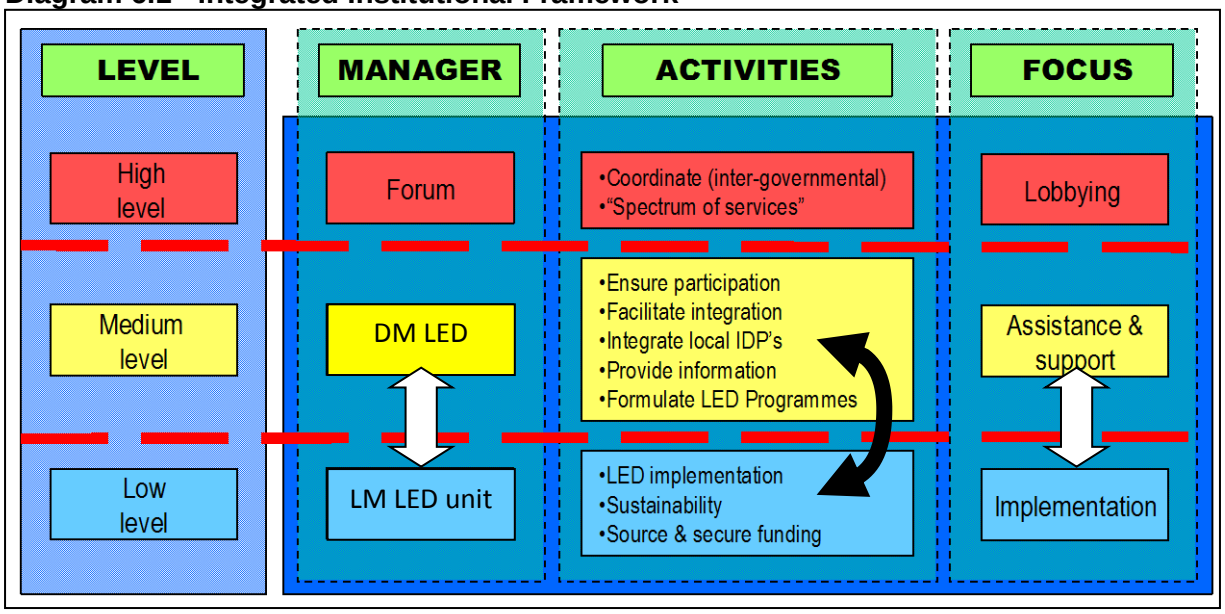
6.2. Integrated Institutional Approach

The integrated nature of the institutional recommendations must be highlighted. This integrative nature is highlighted by the characteristics of the proposed mechanisms to address among others:

1. How to structure the delivery mechanism in order for LED to be executed?
2. The critical issues which are addressed in terms of the above question.

Additionally, the roles and responsibilities of the different levels of government are presented and act as a point of departure. Similarly the actual implementation of the LED activities is viewed as the single most important element that will be able to guarantee LED success. It is for this reason that the proposed framework has been developed. The proposed framework is illustrated in Diagram 6.1.

Diagram 6.1 - Integrated Institutional Framework



It is evident that the formation of the additional body i.e. the LED Forum will not necessitate a complete abdication of LED duties by the Siyathemba Municipality. What is implied is that the "load" on the existing capacity of the LED Unit is extended through the deployment of additional resources.

The Siyathemba LED Unit must still play a central role in terms of the initiation of delivery of development support and assistance programmes. When LED projects are to be initiated and implemented on a practical level, five core activities have to be identified. It should be noted that these core activities are inter-connected and are not separated from each other.

Diagram 6.2 illustrates the inter-connected core-activities of the LED project management process:

Diagram 6.2 – The Core Activities of LED Project Management

- **Activity One:**

Identification refers to those activities pertaining to the identification of potential projects and opportunities that can be developed in the local economy. This is the first practical step to LED. The generation of new ideas and opportunities can be brought about through the establishment of committees, consultation of local communities and brainstorming sessions. Assessment of the initiatives in terms of a SWOT analysis should also be included. It is recommended that the initial step of idea generation and ongoing project/opportunity identification be undertaken by the local Municipality.

- **Activity Two:**

Defining the approach refers to the process of specifically defining the project and implies the actual formulation of business plans. Apart from the actual project design and refinement, the role that the Municipality can play to assist local entrepreneurs also falls into this category and includes activities such as the provision of the necessary infrastructure, ensuring and enabling institutional environment, etc.

- **Activity Three:**

The *Marketing* phase consists of two main components, namely place marketing as well as the marketing of the specific products/services produced by the respective projects. The provision of appropriate mechanisms by the Siyathemba LM to market the area is critically important to the successful attraction of investors to the area. Linked to this is the need for the provision of adequate exposure of local business to the services provided by the Local Municipality.

- **Activity Four:**

Development funding entails the acquiring of finances for implementation and development of projects. It also entail the facilitating efforts of the local authority through the provision of support in the application for funding as well as matching potential investors and funding sources.

- **Activity Five:**

The *implementation* phase entails the culmination of the preceding activities resulting in the identified opportunities being put into action. Assistance during the initial stages of implementation is critical and measures to assist entrepreneurs include the provision of support activities, the formation of partnerships as well as mentoring activities (skills development).

Each of the aforementioned activities/phases of practical implementation is made up of its own components. These components, similar to the activities, are interdependent and progressive and build up to the implementation and evaluation of projects. It is important to note that the Pixley ka Seme District Municipality should assist Siyathemba in all of the abovementioned activities of practical implementation depending on the capacity and/or assistance required.

Table 6.1 identifies the components for each of the activities for practical implementation of the LED strategy and allocates responsibilities to the Local Municipality (Siyathemba) and the District Municipality (Pixley ka Seme) according to capacity.

Table 6.1 - Specific core activities and components

RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
ACTIVITY ONE: IDENTIFICATION		
Local	➔ Idea generation	Establish organising committee. Consult local community- workshops. Consult professional expertise. Brainstorming sessions.
Local	➔ Opportunity identification	Community planning.
Local & District	➔ Business plan formulation	Consult experts. Write business plan.
ACTIVITY TWO: DEFINE APPROACH		
Local & District	➔ Market analysis	Periodic business survey. Benchmarking (success stories). Establish business chambers. Update business database.
Local	➔ Legislation	Review by-laws and amend where necessary.
Local & District	➔ Management	Delegate responsibility to a “driver”.
District	➔ Access to support structures	Make inventory of support services available. Clear understanding of approval and selection processes.

RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
Local	➔ Location	Identify appropriate areas and ensure focused development within selected areas (development nodes).
Local & District	➔ Land & Buildings	Set up an inventory of potential buildings that can be utilised during development by entrepreneurs. Determine where projects can be housed. Approach private sector to release property for utilisation. Negotiate favourable rent rates.
Local & District	➔ Infrastructure	Ensure necessary infrastructure is available to potential investors e. g tarred roads and storm water, sanitation and water.
		Guarantee adequate maintenance of infrastructure and services.
District & Local	➔ Labour force	Encourage and support local training facilities to expand curricula aimed at the broadening of the skills base.
		Encourage and coordinate (as far as possible) Provincial Government Departments to undertake training within Siyathemba.
ACTIVITY THREE: MARKETING		
Local & District	➔ Place marketing	Printed media. Alignment with other initiatives.
Local & District	➔ Lobbying	Lobby appropriate government departments.
Local & District	➔ Project launches	Use launches to create awareness of project. Communicate progress of the projects to the community.
ACTIVITY FOUR: DEVELOPMENT FUNDING		
District & Local	➔ Funding	Develop database of all donor and funding agencies. Facilitate the successful application for funding from the various institutions. Provide info to applicants regarding different potential types of funding and funding institutions.
District & Local	➔ Grant funding	Lobby respective donor agencies to provide grant funding.

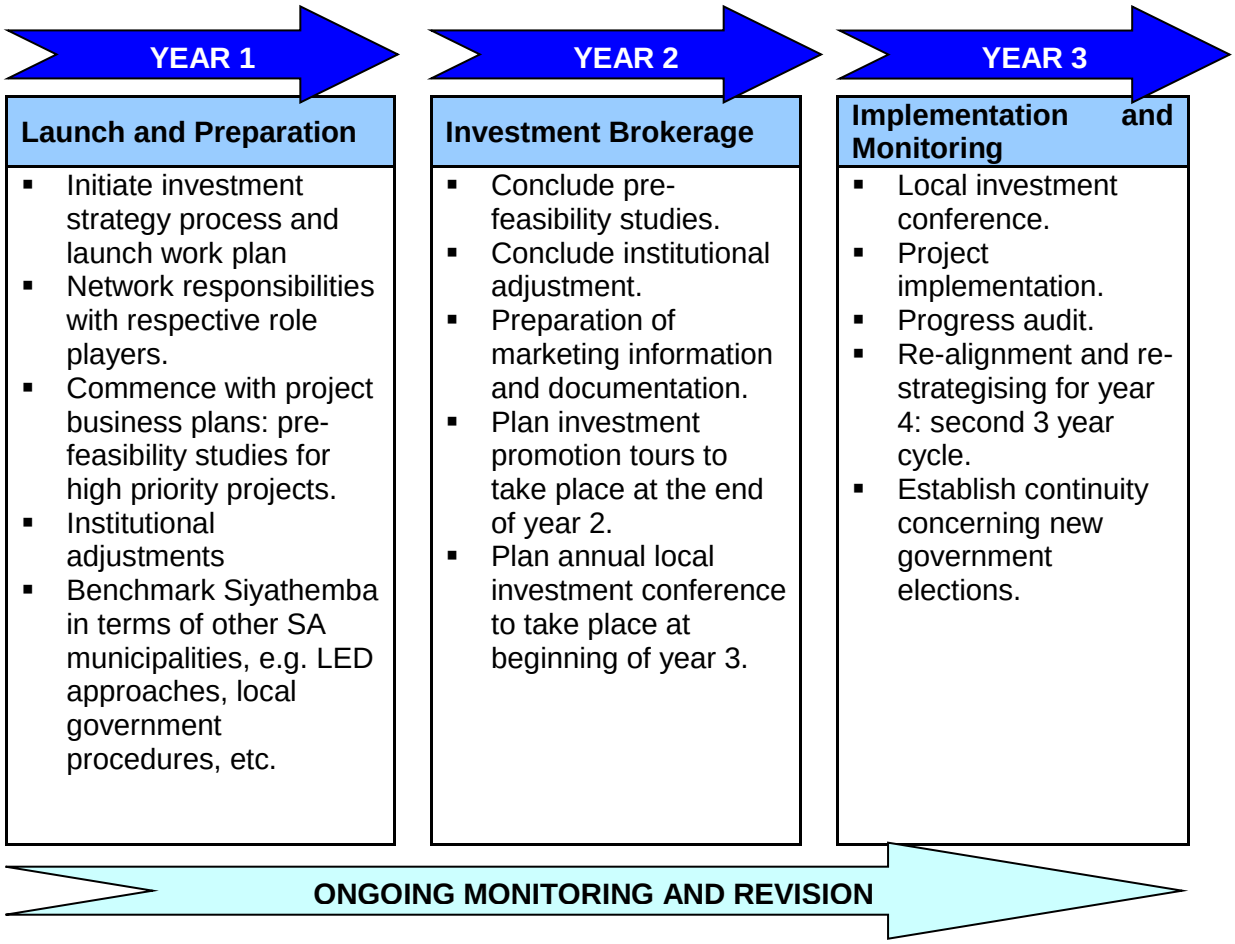
RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
District & Local	➔ Loans	Engage commercial institutions to provide loans to emerging entrepreneurs. Assist entrepreneurs during applications for loans.
Local & District	➔ Own capital	Encourage existing business to expand operations within the local area.
District	➔ Seed and venture capital	Support applications to organizations such as the IDC, which provides seed and venture capital to potential investors.
District	➔ Development Support	Enhance awareness and skills in areas such as: ▪ Business planning ▪ Customer service ▪ Performance management ▪ New market opportunities, etc.
District & Local	➔ Establishment support	Provide start-up service (e.g. incubator) to entrepreneurs such as: ▪ Determining customer base ▪ Competitive pricing ▪ Promotional programmes ▪ Competition ▪ Strategic/convenient location
District & Local	➔ Matchmaking	Link opportunities, funding and entrepreneurs.
		Referral of business opportunities as well as assistance in the application for funding.
ACTIVITY FIVE: IMPLEMENTATION		
District & Local	➔ Partnerships	Establish partnerships between the existing local business and emerging entrepreneurs.
		Joint Ventures (private & public)
Local	➔ Fast-track approval process	Stream line the approval process to provide investors with speedy replies with regards to developmental aspects/ enquiries/applications. Convene extra-ordinary council meetings where necessary.
Local	➔ Support structures	Provide counselling (advice, info and support) at one-stop centres for business development, tourism, etc. at Municipal offices.
Local & District	➔ Incubators	Establish local business support centres (LBSCs) and incubators.
District & Local	➔ Management Support services	Training of entrepreneurs in practical business skills as well as more general workshops on self-employment. Provide administrative support to emerging entrepreneurs. Provide mentorship programmes.

RESPONSIBLE AGENT	COMPONENTS	MAJOR ACTIVITIES
District & Local	➔ Capacity development	Experience exchange – providing local entrepreneurs an opportunity to share experiences and ideas through seminars, workshops, etc. Coordinate and link activities undertaken by the local training facilities, and government departments. Develop and apprenticeship/traineeship scheme where a number of local businesses share a group of trainees.
Local & District	➔ Mentoring	One-to-one guidance. Continued advice and regular meetings with business operators. Guidance with marketing, accounting and management procedures. Assistance in identifying and solving problems. Introductions to business and professional organisations. Personal support.

6.3. Phased Implementation Plan

The proposed LED Implementation Plan is illustrated in Diagram 5.3. The Figure summarises important actions and financial considerations pertaining to the first of a number of consecutive three year implementation and revision cycles.

Diagram 6.3 - Phased Implementation and Financial Planning, First 3-year cycle



Budgetary allowances for business plans, investment tours and the investment conference should provide for R700 000 to R1 million per annum over the first three year cycle.

6.4. Monitoring and Evaluation System

Implementation of the LED Strategy needs to be monitored on an ongoing basis. Progress with respect to new investment and the impact thereof on Siyathemba's economy needs to be constantly assessed and monitored over the implementation period of the strategy. To enhance efficiency and effectiveness of the strategy, continuous adjustments need to be made, based on market fluctuations and demand changes. This entails continuous strategic re-positioning.

The rationale for developing and updating a Monitoring and Evaluation System include the following:

- Inform the sector departments of the development needs in Siyathemba
- Ensure that all role players are aware of all projects planned in the area
- Make information of all projects available at one glance
- Compare profiles, projects and funds allocated
- Compare Siyathemba with other Municipalities in South Africa
- Indicate whether national or provincial policies are adhered to by comparing the number and type of projects and the amount of funding
- Inform all role players on the progress of project implementation
- Inform provincial departments and politicians about the status of implementation by Siyathemba
- Determine the contribution and effectiveness of each Pillar, Programme and Project. In this regard Key Performance Indicators (KPIs) can be linked to specific strategies (PGDS, LED & IDP)
- Pinpoint the areas of intervention through progress and tracking reports
- Compare progress over numerous years

The KPIs associated with the various identified projects and programmes are illustrated in Table 6.2.

Table 6.2 – Siyathemba LED performance monitoring indicators

LED Pillar	Programmes	Projects	Five year KPIs
Pillar 1 **Agriculture and Rural Development**	Agro-processing Emerging Farmer Support	Maize & Wheat Mill Dairy Processing & Packaging Wool Production Production of essential oils Extensive Irrigation Crop Farming along the Orange River Mentorship Programme in association with commercial farmers Demonstration of new farming	Number of emerging farmers in operation Portion of crops which are beneficiated locally Usage of arable farm land for cultivation or grazing Export tonnage of farm produce (beneficiated or not) Number of commercial uses identified for existing crops Number of new agro-processing units

LED Pillar	Programmes	Projects	Five year KPIs
		methods and technologies Establishment of an agricultural college in Prieska Availing farm land for emerging farmers Goat meat processing and packaging	Number of emerging farmers supported Emerging farmer support programmes
Pillar 2 **Enterprise Development**	Investment Promotion and Development SMME and Entrepreneurial Support	Development of serviced business plots for retail and industrial development (especially in Prieska) New small grocery shop and restaurant development Construction equipment sales and rental SMME Training Centre Availing suitable infrastructure (stalls) for informal traders Development and implementation of appropriate town planning regulations for small businesses in the area	Number of SMMEs in the area (growth) Number of SMMEs supported through assistance programmes Number of LED initiatives implemented through the LED Forum Number of people employed by SMMEs Number of new SMMEs Survival rate of SMMEs Infrastructure support for informal traders (e.g. stalls and ablution facilities)
Pillar 3 **Tourism Development**	Improving the Tourism Profile	Resort and adventure tourism along the Orange River New Casino Development (Prieska)	Siyathemba share of the Pixley ka Seme tourism market. Development of new tourism packages & routes

LED Pillar	Programmes	Projects	Five year KPIs
		Game Reserve Development The development of an annual festival at “Die Koppie” or "Die Bos"	Tourism investment (in new and existing offerings/destinations)
Pillar 4 **Infrastructure and Industrial Development**	Industrial Diversification and Infrastructure Development	Local Recycling Plant (paper, plastic and glass) Brick Manufacturing Plant Semi-precious stones beneficiation hub Building sand quarry A local Gemstone Beneficiation Plant The processing of salt	Fixed investment, job creation and production Investment incentives (packages available) Value of real private sector investment p.a. Manufacturing GGP Value of annual exports Diversification in the Manufacturing sector Competitiveness of exports The cost of doing business in Siyathemba

6.5. The Way Forward

To ensure the optimal implementation of the Siyathemba Local Economic Development Strategy, the following recommendations are made here:

1. Make sure that all people employed to undertake implementation have the relevant experience, expertise, skills, etc. to ensure effective management and implementation.
2. Make use of experts for the drafting of the relevant project business plans and utilise the available funding sources.
3. Ensure that all information needed for implementing a project is included in the business plan, including the responsible parties, the amount of funding required, the timeframes for implementation, resources and equipment needed for implementation, etc.
4. Ensure balanced economic development by means of adopting an integrated, holistic, coordinated and diverse developmental focus.
5. Start by implementing the programmes and projects with the fastest anticipated impact on job creation, poverty alleviation, BBBEE, SMME development, increase in living conditions, human development, etc. followed by those with a medium and longer term effect.
6. Make sure all financial sources, equipment, human resources, etc. are in place and available before starting with the implementation of a programme and/or project.

7. Focus on stimulating economic development and empowerment of local people at the same time.
8. Make sure that the implementation of projects are executed by local people and not imported labour.
9. Set reasonable timeframes and keep a monthly/weekly track record to evaluate the progress of all necessary actions.

An important aspect for successful implementation is to ensure that all involved take ownership of the programmes and projects. Without ownership-taking of a programme and/or project, success will not be accomplished. It is also important to incorporate monitoring and evaluation elements for each of the Pillars into a performance management system, to ensure accountability and responsibility for implementation and to eradicate potential conflicts.

Performance Management

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1. Key Performance Areas
    a. Financial Management
    b. Social and Economic Development
    c. Institutional Transformation
    d. Democracy and Governance
    e. Infrastructure and Services

Under Construction; to be reviewed by September 2013

SIYATHEMBA MUNICIPALITY

Final

BUDGET SDBIP 2013/2014

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c) Monthly Projections of Service Delivery Targets and Performance indicators for each vote

6 Performance Plans for Senior Managers

1 INTRODUCTION

This document provides for the annual submission of the Service Delivery and Budget Implementation Plan (SDBIP) as required in terms of the Municipal Finance Management Act. It should be read in conjunction with the Municipality's Integrated Development Plan (IDP), Budget and Strategic Business Unit Business Plans for the financial year 2012/2013.

The SDBIP gives affect to the Integrated Development Plan (IDP) and budget of the municipality therefore the IDP and budget must are fully aligned with each other, as required by the MFMA. The SDBIP provide the vital link between the mayor, council (executive) and the administration, and facilitates the process for holding management accountable for its performance.

The SDBIP serves as a "contract" between the administration, council and community expressing the goals and objectives set by the council as quantifiable outcomes that can be implemented by the administration over the next twelve months. This provides the basis for measuring performance in service delivery against end of-year targets and implementing the budget.

2 LEGISLATIVE FRAMEWORK IN TERMS OF MFMA

The Municipal Finance Management Act (MFMA) of 2003 is aimed to secure sound and sustainable management of the financial affairs of municipalities and to establish treasury norms and standards through continually promoting transparency, participation and accountability of municipalities.

The MFMA requires that municipalities prepare a Service Delivery and Budget Implementation Plan as a strategic financial management tool to ensure that budgetary decisions that are adopted by municipalities for the financial year are aligned with their Integrated Development Plan Strategy.
According to section I of the Act a service delivery and budget implementation plan means a detailed plan approved by the mayor of a municipality in ter of section 53(1)(c)(ii) for implementing the municipality's delivery of municipal services and its annual budget, and which must indicate-

(a) Projections for each month of the year
    (i) Revenue to be collected, by source; and
    (ii) Operating and capital expenditure, by vote;
(b) Service delivery targets and performance indicators for each quarter;
(c) Any other matters that may be prescribed, and includes any revisions of such plan by the mayor in terms of section 54 (1)(c);

In terms of Section 53 (3) of Municipal Finance Management Act (MFMA) No. 56 of 2003. The mayor must ensure-

(a) that the revenue and expenditure projections for each month and the service delivery targets and performance indicators for each quarter, as set out the service delivery and budget implementation plan, are made public no later then 14 days after the approval of the service delivery and budget implementation plan; and
(b) that the performance agreements of the municipal manager, senior managers and any other categories of official as may be prescribed, are made public no later than 14 days after the approval of the municipality's service delivery and budget implementation plan. Copies of such performance agreements must be submitted to the council and the MEC of local government in the province.

3 **Budget breakdown**

KEY PERFORMANCE AREA	PRIORITIES	PROJECTS	R-OVER 2011/2012 000	OPEX 2012/2013 000	CAPEX 2012/2013 000	REVENUE 2012/2013 000	SURPLUS/ (DEFICIT) 2012/2013
Basic Service Delivery	MIG - National Allocation - R12 429 000	Marydale Waste Water Treatment Works	-		**6 882 050**	**6 882 050**	-
	(Calculations includes own funds portion).	Marydale Solid Waste			**1 824 000**	**1 824 000**	
		Prieska Solid Waste			**2 166 000**	**2 166 000**	
		Prieska Cemetery Upgrading			**2 136 325**	**2 136 325**	
	Provincial allocation - DWAF	Water related infrastructure			**2 870 000**	**2 870 000**	
	Provincial allocation - DWAF	Water related infrastructure			**500 000**	**500 000**	
	Provincial allocation - EPWP	EPWP		**1 000 000**		**1 000 000**	
	Dept Sports Arts & Culture - Revenue Generated	Library development & transformation (Template received - June 2012)		**689 000**		**689 000**	-
	Equitable Share	Equitable Share		-		**10 476 307**	**10 476 307**
	Equitable Share	Free Basic Services		**9 631 693**		-	
	Revenue generated	Property Rates				**6 000 000**	**6 000 000**
	Revenue generated	Collection charges				**1 007 500**	
	Revenue generated	Licences & Permits				**5 000**	**5 000**
	Revenue generated	Rental of facilities & eqpuipment				**802 500**	**802 500**
	Revenue generated	Electricity, Water, Sanitation and Refuse				**30 640 999**	**30 640 999**
	Expenditure	Bulk purchases		**13 317 610**			
	Revenue generated	Other income		-		**12 514 220**	**12 514 220**
	Revenue generated	Agency Services/Licences		-		**1 265 000**	**1 265 000**
	Own Resources	Repairs & Maintenance (Other Materials)		**5 628 100**		-	**-5 628 100**
	Own Resources	General Expenses		**10 954 255**		-	**-10 954 255**
Municipal Institutional	MSIG	MSIG (Refer to business plan for 2012/2013)		**800 000**		**800 000**	-
Transformation				-		-	-
							-
Local Economic Development	Tourism Development	Bos Development Implementation		-		-	-
Municipal Finance viability	FMG	FMG (Refer to business plan for 2012/2013)		**1 500 000**		**1 500 000**	-
& transformation							-
	Revenue generated	Fines		-		**81 000**	**81 000**
	Equitable Share	Government Grants and Subsidies		-		-	-
	Interest earned	Debtors		-		**1 750 000**	**1 750 000**
	Interest earned	External Investments		-		**145 000**	**145 000**
	Interest paid	ABSA Loans - Fleet		**780 124**		-	**-780 124**
	Own Resources	Employee related costs		**23 832 451**			
	Own Resources	Employee social contribution		**3 793 568**			
	Own Resources	Salaries & benefits (Personnel, Councilors & Ward Committee Members)		**2 069 200**		-	**-2 069 200**
	Grants and Subsidies/Contribution	Contribution Community/Awareness		-		-	-
	towards the Community			-		-	-
				-		-	-
	Depreciation	Depreciation on assets		**5 200 000**		-	**-5 200 000**
	Bad debts	Debt impairment		**3 500 000**		-	**-3 500 000**
Good Governance and	Council Meetings	Council Meetings		-		-	-
Public Participation		Ward Commettee meetings		-		-	-
(See Targets of MM & Other		Council meets the people		-		-	-
Departmental Heads)		Committee meetings		-		-	-
		IDP revenue		-		-	-
		Budget meetings		-		-	-
		Local Labour Forum meetings		-		-	-
		Inter Governmental		-		-	-
		Forum meetings		-		-	-
Total Budget				**82 696 001**	**16 378 375**	**85 054 901**	**14 019 475**

4 **The SDBIP Concept**

The SDBIP is a management, implementation and monitoring tool that will assist the mayor, councillors, municipal manager, senior managers and community. It will facilitate the accountable role that managers hold to the Council and that Councillors hold to the community. It also fosters the management, implementation and monitoring of the budget, performance of senior management and the achievement of the strategic objectives as laid out in the IDP.

Whilst the budget sets yearly service delivery and budget targets (revenue and expenditure per vote), it is imperative that in-year mechanisms are able to measure performance and progress on a continuous basis. Hence, the end-of-year targets must be based on quarterly and monthly targets, and the municipal manager must ensure that the budget is built around quarterly and monthly information. Being a start-of-year planning an target tool, the SDBIP gives meaning to both in-year reportting in terms of section 71 (monthly reporting), section 72 (mid-year report) and end-of-year annual reports.

5 **Components of the SDBIP**

- ü Monthly projections of revenue to be collected for each source
- ü Monthly projections of expenditure (operating & capital) and revenue for each vote
- ü Quarterly projections of service delivery targets and performance indicators for each vote

(a) **Monthly projections of revenue to be collected for each source**

	July	August	September	October	November	December	January	February	March	April	May	June
	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0
Service Charges	2 553 417	2 553 417	2 553 417	2 553 417	2 553 417	2 553 417	2 553 417	2 553 417	2 553 417	2 553 417	2 553 417	2 553 412
Property Rates and Collection Charges	446 136	446 136	2 100 000	446 136	446 136	446 136	446 136	446 136	446 136	446 136	446 138	446 138
Rental; facilities & equipment	66 875	66 875	66 875	66 875	66 875	66 875	66 875	66 875	66 875	66 875	66 875	66 875
Interest: External Investments	12 083	12 083	12 083	12 083	12 083	12 083	12 083	12 083	12 083	12 083	12 083	12 087
Interest: Debtors	145 833	145 833	145 833	145 833	145 833	145 833	145 833	145 833	145 833	145 833	145 833	145 837
Traffic: Fines; Licences & Permits & Agency Services	112 583	112 583	112 583	112 583	112 583	112 583	112 583	112 583	112 583	112 583	112 587	112 583
Transfers Recognised: Operational	2 008 083	2 008 083	2 008 083	2 008 083	2 008 083	2 008 083	2 008 083	2 008 083	2 008 083	2 008 083	2 008 083	2 008 087
Transfers Recognised: Capital	1 374 916	1 374 916	1 374 916	1 374 916	1 374 916	1 374 916	1 374 916	1 374 916	1 374 916	1 374 916	1 374 916	1 374 924
Other Income	188 491	188 491	188 491	188 491	188 491	188 491	188 491	188 491	188 491	188 493	188 499	188 491
Gains on disposal	-	-	500 000	-	-	-	-	-	-	-	-	-
Total Revenue by Source	**6 908 417**	**6 908 417**	**9 062 281**	**6 908 417**	**6 908 417**	**6 908 417**	**6 908 417**	**6 908 417**	**6 908 417**	**6 908 419**	**6 908 431**	**6 908 434**

Overall Total **R 85 054 901**

COMMENTS
Rates includes - Residential, State, Business, Public Infrastructure Organisations and Farmers. Farms affected by the New DMA will be phased in with a 75% discount in year 1, 50% year 2 and 25% in year 3. With an additional 30% for the non-delivery of services.
Service charges includes - Electricity, Water, Sewerage and Refuse.
Capital Funding - As per IDP
Other Income - Includes: Other revenue to be received, building plan fees, copies & certificates, tombstone fees, violation duty on account holders, charges for installation of services, garden refuse and garbage etc.

(b) **Monthly projections of expenditure for each source**

	July	August	September	October	November	December	January	February	March	April	May	June
	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0
Employee related costs (including employee social contributions)	2 302 168	2 302 168	2 302 168	2 302 168	2 302 168	2 302 168	2 302 168	2 302 168	2 302 168	2 302 169	2 302 169	2 302 169
Remuneration of councillors	172 433	172 433	172 433	172 433	172 433	172 433	172 433	172 433	172 433	172 433	172 437	172 433
Depreciation and Asset Impairment and Debt Impairment	725 000	725 000	725 000	725 000	725 000	725 000	725 000	725 000	725 000	725 000	725 000	725 000
Bulk purchases	1 109 800	1 109 800	1 109 800	1 109 800	1 109 800	1 109 800	1 109 800	1 109 800	1 109 800	1 109 800	1 109 805	1 109 805
Transfers and Grants	2 558 255	2 558 255	2 558 255	2 558 255	2 558 255	2 558 255	2 558 255	2 558 255	2 558 255	2 558 257	2 558 258	2 558 258
Interest paid	65 010	65 010	65 010	65 010	65 010	65 010	65 010	65 010	65 010	65 010	65 014	65 010
Other materials	469 008	469 008	469 008	469 008	469 008	469 008	469 008	469 008	469 008	469 008	469 008	469 012
General expenses	854 521	854 521	854 521	854 521	854 521	854 521	854 521	854 521	854 521	854 521	854 521	854 524
Total Expenditure by Source	**8 256 195**	**8 256 195**	**8 256 195**	**8 256 195**	**8 256 195**	**8 256 195**	**8 256 195**	**8 256 195**	**8 256 195**	**8 256 198**	**8 256 212**	**8 256 211**

Overall Total **99 074 376**

Deficit **-14 019 475**

(c) **Monthly projections of expenditure (operating & capital) and revenue for each vote**

	July			August			September			October		
	Opex R 0	Capex R 0	Rev R 0	Opex R 0	Capex R 0	Rev R 0	Opex R 0	Capex R 0	Rev R 0	Opex R 0	Capex R 0	Rev R 0
Department: Municipal Manager	**672 553**		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**
Vote: Council & Executive - Council	**672 553**	-	-	**672 553**	-	-	**672 553**	-	-	**672 553**	-	-

Total Revenue for the Year	**635 130**
Total Opex for the Year	**8 070 630**
Overall Total	**8 705 760**
Overall Totals according to Vote/MM Targets	**8 705 760**
Difference	**-**

	July			August			September			October		
	Rev R 0	Capex R 0	Opex R 0	Rev R 0	Capex R 0	Opex R 0	Rev R 0	Capex R 0	Opex R 0	Rev R 0	Capex R 0	Opex R 0
Department: Finance	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**
Vote: Public Safety - Lisences and Traffic						-			-			-
Vote: Cemetery	4 417			4 417			4 417			4 417		
Vote: Camping facilities	-			-			-			-		
Vote: Public Works	92 083			92 083			92 083			92 083		
Vote: Cleansing services	353 097			353 097			353 097			353 097		
Vote: Sewerage	950 968			950 968			950 968			950 968		
Vote: Electricity services	1 811 754			1 811 754			1 811 754			1 811 754		
Vote: Water services	915 835			915 835			915 835			915 835		
Vote: Council general expenses												
Vote: Finance & Admin - Administrasie Stadsekretaris Dept	8 333			8 333			8 333			8 333		
Vote: Finance & Admin - Administrasie Tesourie Dept	1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868
Vote: Finance & Admin - Property Rates	668 748		-	668 748		-	668 748		-	668 748		-
Vote: Finance & Admin - Meent	25 417			25 417			25 417			25 417		
Vote: Finance & Admin - Munisipale Geboue en Kantore	33 333			33 333			33 333			33 333		
Vote: Finance & Admin - Behuising Personeelskema	5 000			5 000			5 000			5 000		

Total Revenue for the Year	**73 945 722**
Total Opex for the Year	**25 474 420**
Overall Total	**99 420 142**
Overall Totals according to Votes	**99 767 642**
Difference	**-347 500**

Department: Corporate & Comm. Serv	**469 871**	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**
Vote: Public Safety - Lisences and Traffic	129 494		184 408	129 494		184 408	129 494		184 408	129 494		184 408
Vote: Finance & Admin - Administrasie Stadsekretaris Dept	248 738			248 738			248 738			248 738		
Vote: Finance & Admin - Meent	1 781			1 781			1 781			1 781		
Vote: Finance & Admin - Munisipale Geboue en Kantore	28 885			28 885			28 885			28 885		
Vote: Finance & Admin - Administrasie Tesourie Dept												
Vote: Finance & Admin - Behuising Personeelskema	2 238			2 238			2 238			2 238		
Vote: Community and Social Services - Public Library	58 736		29 592	58 736		29 592	58 736		29 592	58 736		29 592

Total Revenue for the Year	**2 568 000**
Total Opex for the Year	**5 638 456**
Overall Total	**8 206 456**
Overall Totals according to Votes	**12 607 861**
Difference	**-4 401 405**

Department - Technical Services	**6 838 393**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**
Vote: Cemetaries	1 125		-	1 125			1 125			1 125		
Vote: Fire Brigade	500		-	500			500			500		
Vote: Disaster Management	1 667		-	1 667			1 667			1 667		
Vote: Camping Facility	658		-	658			658			658		
Vote: Public Works	1 281 770		-	1 281 770			1 281 770			1 281 770		
Vote: Parks & Recreation	193 229			193 229			193 229			193 229		
Vote: Cleansing	500 619		-	500 619			500 619			500 619		
Vote: Sewerage	696 699		-	696 699			696 699			696 699		
Vote: Airstrip	833		-	833			833			833		
Vote: Electricity Services	1 877 481		-	1 877 481			1 877 481			1 877 481		
Vote: Water Distribution	675 479		-	675 479			675 479			675 479		
Vote: Health	-		-	-			-			-		
Vote: Roads	-	-		-	-		-	-		-	-	
Vote: Projects (provincial grants & subsidies) - DWAF (Refer to Public Works)	83 333		83 333	83 333		83 333	83 333		83 333	83 333		83 333
Vote: Projects (national grants & subsidies) - MIG	1 525 000	596 333		596 333	596 333		596 333	596 333		596 333	596 333	
Vote: Projects (Internallly Generated Funds)		-	-		-	-		-	-		-	-

Total Revenue for the Year	**16 390 282**
Total Opex for the Year	**28 870 886**
Overall Total	**45 261 168**
Overall Totals according to Votes	
Difference	
Capex for the Year	
MIG Project	**#REF!**
DWAF Project	**#REF!**
Roads Project	**#REF!**
Overall Total	**#REF!**
Difference	**#REF!**

Yearly projections of expenditure (operating & capital) and revenue for Department

	Overall Totals			
	Revenue	Opex	Capex	Capex Funding
Department: Municipal Manager	**#REF!**	**#REF!**		
Department: Finance	**#REF!**	**#REF!**		
Department: Corporate & Community Services	**#REF!**	**#REF!**		
Department: Technical Services	**#REF!**	**#REF!**	**#REF!**	**#REF!**
Overall Total	**#REF!**	**#REF!**	**#REF!**	**#REF!**
Deficit	**#REF!**			

November			December			January			February			March			April			May			June		
Opex	Capex	Rev	Opex	Capex	Rev	Opex	Capex	Rev	Opex	Capex	Rev	Opex	Capex	Rev	Opex	Capex	Rev	Opex	Capex	Rev	Opex	Capex	Rev
R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0
672 553		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**	**672 553**		**52 928**
672 553	-	-	**672 553**	-	-	**672 553**	-	-	**672 553**	-	-	**672 553**	-	-	**672 553**	-	-	**672 553**	-	-	**672 553**	-	-

November			December			January			February			March			April			May			June		
Rev	Capex	Opex	Rev	Capex	Opex	Rev	Capex	Opex	Rev	Capex	Opex	Rev	Capex	Opex	Rev	Capex	Opex	Rev	Capex	Opex	Rev	Capex	Opex
R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0	R 0
6 162 144	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**	**6 162 144**	-	**2 122 868**
		-			-			-			-			-			-			-			-
4 417			4 417			4 417			4 417			4 417			4 417			4 417			4 417		
-			-			-			-			-			-			-			-		
92 083			92 083			92 083			92 083			92 083			92 083			92 083			92 083		
353 097			353 097			353 097			353 097			353 097			353 097			353 097			353 097		
950 968			950 968			950 968			950 968			950 968			950 968			950 968			950 968		
1 811 754			1 811 754			1 811 754			1 811 754			1 811 754			1 811 754			1 811 754			1 811 754		
915 835			915 835			915 835			915 835			915 835			915 835			915 835			915 835		
8 333			8 333			8 333			8 333			8 333			8 333			8 333			8 333		
1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868	1 293 159		2 122 868
668 748		-	668 748		-	668 748		-	668 748		-	668 748		-	668 748		-	668 748		-	668 748		-
25 417			25 417			25 417			25 417			25 417			25 417			25 417			25 417		
33 333			33 333			33 333			33 333			33 333			33 333			33 333			33 333		
5 000			5 000			5 000			5 000			5 000			5 000			5 000			5 000		

469 871	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**	**469 871**	-	**214 000**
129 494		184 408	129 494		184 408	129 494		184 408	129 494		184 408	129 494		184 408	129 494		184 408	129 494		184 408	129 494		184 408
248 738			248 738			248 738			248 738			248 738			248 738			248 738			248 738		
1 781			1 781			1 781			1 781			1 781			1 781			1 781			1 781		
28 885			28 885			28 885			28 885			28 885			28 885			28 885			28 885		
2 238			2 238			2 238			2 238			2 238			2 238			2 238			2 238		
58 736		29 592	58 736		29 592	58 736		29 592	58 736		29 592	58 736		29 592	58 736		29 592	58 736		29 592	58 736		29 592

5 909 726	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**	**5 909 726**	**596 333**	**83 333**
1 125			1 125			1 125			1 125			1 125			1 125			1 125			1 125		
500			500			500			500			500			500			500			500		
1 667			1 667			1 667			1 667			1 667			1 667			1 667			1 667		
658			658			658			658			658			658			658			658		
1 281 770			1 281 770			1 281 770			1 281 770			1 281 770			1 281 770			1 281 770			1 281 770		
193 229			193 229			193 229			193 229			193 229			193 229			193 229			193 229		
500 619			500 619			500 619			500 619			500 619			500 619			500 619			500 619		
696 699			696 699			696 699			696 699			696 699			696 699			696 699			696 699		
833			833			833			833			833			833			833			833		
1 877 481			1 877 481			1 877 481			1 877 481			1 877 481			1 877 481			1 877 481			1 877 481		
675 479			675 479			675 479			675 479			675 479			675 479			675 479			675 479		
-			-			-			-			-			-			-			-		
-	-		-	-		-	-		-	-		-	-		-	-		-	-		-	-	
83 333		83 333	83 333		83 333	83 333		83 333	83 333		83 333	83 333		83 333	83 333		83 333	83 333		83 333	83 333		83 333
596 333	596 333	-	596 333	596 333	-	596 333	596 333	-	596 333	596 333	-	596 333	596 333	-	596 333	596 333	-	596 333	596 333	-	596 333	596 333	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Department- Office of the Municipal Manager
Amounts are stated in R 000

Vote/Indicator	Unit of measurement	Annual Target	Annual Expenses	Annual Revenue	Month Ending Jul-12		Month Ending Aug-12		Month Ending Sep-12		Month Ending Oct-12	
					Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
	1. Scheduled Council meetings with full preparation	12	R 96 848	R 7 622	1 Council meeting		1 Council meeting		1 Council meeting		1 Council meeting	
1. To effectively support internal political interfaces	2. Special Council meetings	6	R 48 424	R 3 811			1 Sp. Counc. meeting				1 Sp. Counc. meeting	
	3. Council committee meetings	12	R 96 848	R 7 622	1 coun comm meeting		1 coun comm meeting		1 coun comm meeting		1 coun comm meeting	
	1. Intergovernmental Relation Forum	4	R 43 581	R 3 430			Intergov Forum meet					
2. To effectively support external political interfaces	2. % of Forum Decisions implemented	100% of diss effec	R 21 791	R 1 715					Forum decisi meeting			
	3. Council meets the people	16	R 176 747	R 13 909					4 Coun meet the people			
3. To effectively support high level strategic and operational interfaces and activities	1. Success of perfomance management for direct reports reviewes (quarterly review)	100%	R 322 825	R 25 405					PMS reports			
	1. Completion of 2011/12 Annual Reports	1	R 209 836	R 16 513			2007/08 Annual Report					
4. To ensure Performance Management & Reporting	2. Number of management Performance Reports submitted to Council	4	R 839 346	R 66 054					Performance reports to Council			
	1. Approval of an MSA compliant IDP by Council (Annual Review)-September	1	R 80 706	R 6 351					Annual Review			
5. Ensure development of a credible Integrated Development Plan	2. % of Identified IDP Projects completed to business plan	100%	R 80 706	R 6 351								
6. Development of policies and by-laws	1. No. of identified policies completed (Spacial Development Framework, Enviromental Manangement, HR Review, Anti Corruption, Mining Policy, Conflict Manag)	1 policy per 2 mth	R 262 295	R 20 642	SDF				Environm Managem.			
	2. Review standard by-laws & submit to council for adoption	26	R 786 886	R 61 925								
7. Ensure effective customer care	1. Review of customer care policy (No, of Customer complaints satisfactory attended to/resolved)	100%	R 161 413	R 12 703	Report on cus tomer care		Report on cust. Care		Report on cust. Care		Report on cus tomer care	
8. Ensure effective financial management	1. % attainment of Budgetary allocations	Not more then 5% variance	R 807 063	R 63 513	Sect 71 report		Sect. 71 report		Sect. 71 report			
	1. Establish targets of administration	100%	R 201 766	R 15 878	Targets set		Monthly		Monthly		Monthly	
9. Ensure effective administrative management & internal controls					& adopted		report		report		report	
	2. Monthly Departmental reports	36	R 201 766	R 15 878	Monthly		Monthly		Monthly		Monthly	
					report		report		report		report	
	3. HOD's Meetings	24	R 80 706	R 6 351	2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings	
	4. Audit committee meetings	4	R 80 706	R 6 351					Audit Com Meeting			
	5. Answering of internal audit reports	4	R 80 706	R 6 351					Internal AR			
	6. Submission of bi-monthly reports by directorates to	6	R 161 413	R 12 703			BM Reports				BM Reports	
	Council for oversight											

Vote/Indicator	Unit of measurement	Annual Target	Annual Expenses	Annual Revenue	Month Ending Jul-08		Month Ending Aug-08		Month Ending Sep-08		Month Ending Oct-08	
					Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
10. Ensure effective technical management	1.Monitoring of conditional grants according to business plans - monthly reports	100%	R 161 413	R 12 703	Monthly Report		Monthly Report		Monthly Report		Monthly Report	
	2. Monitoring of DBSA Loan against business plans	100%	R 161 413	R 12 703	Monthly Report		Monthly Report		Quarterly report		Monthly Report	
	3. % spending of Budget - O&M	100%	R 161 413	R 12 703	Monthly Report		Monthly Report		Monthly Report		Monthly Report	
	4. Eradication of Back Logs - SDBIP targets	100%	R 161 413	R 12 703	Monthly Report		Monthly Report		Monthly Report		Monthly Report	
	5. Reduction in downtime in Basic Services - Water (days p.s) Electricity (days p.a)	12 days p.s	R 161 413	R 12 703					Quarterly d/t report			
11. Ensure effective planning and project management	1. Review and approval of LED Strategy	100%	R 201 766	R 15 878					LED strat adopted			
	2. Develop a Spacial Development Framework	100%	R 201 766	R 15 878					SDF all. with DM			
	3. Review Water Services Development Plan	100%	R 201 766	R 15 878					Reviewed & Adopt			
	4. Review disaster management plan (linked to DME plan)	100%	R 201 766	R 15 878					DMP linked to DM			
12.Human Resourse Development	1. Review & report on Equity Plan	4	R 221 942	R 17 466	Reviewed & report						Equity Report	
	2. Review & report Workplace Skills Plan	1	R 60 530	R 4 763								
	3. Review and approve Organogram	1	R 60 530	R 4 763					Reviewed & approved			
	4. % Implementation of Workplace Skills Plan	100%	R 60 530	R 4 763								
13. Labour Relations	1. Local Labour Forum meetings	4	R 302 649	R 23 817					Meeting & Report			
	2. Disciplinary Cases Reported & Completed	100%	R 100 883	R 7 939	As required							
14.Health, Safety, & Environment	1. No of Health & Safety Committee meetings	4	R 161 413	R 12 703					Meeting			
	2. Bi-Monthly H & S reports	6	R 161 413	R 12 703	Report				Report			
	3. Prepare H & S equipment schedule	1	R 40 353	R 3 176								
	4. Safety equipment issued according to schedule	100%	R 40 353	R 3 176	As per schedule							
15. Public participation & good governance	1.No of Ward Committees held (monthly)	44	R 201 766	R 15 878	1 meeting per 4 wards		1 Meeting per 4 wards		1 meeting per 4 wards		1 Meeting per 4 wards	
	2. No of IDP Rep meetings	4	R 40 353	R 3 176					IDP meeting			
	3. No of Budget Consultation meetings	6	R 80 706	R 6 351								
	4. Other Public Consultation sessions	6	R 80 706	R 6 351			Public Consultat.				Public Consultat.	

Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending	
Nov-12		Dec-12		Jan-13		Feb-13		Mar-13		Apr-13		May-13		Jun-13	
Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
1 Council meeting		1 Council meeting		1 Council meeting		1 Council meeting		1 Council meeting		1 Council meeting		1 Council meeting		1 Council meeting	
		1 Sp. Counc. meeting				1 Sp. Counc. meeting				1 Sp. Counc. meeting				1 Sp. Counc. meeting	
1 coun comm meeting		1 coun comm meeting		1 coun comm meeting		1 coun comm meeting		1 coun comm meeting		1 coun comm meeting		1 coun comm meeting		1 coun comm meeting	
Int. Govern meetings						Int. Govern meetings						Int. Govern meetings			
		80% Forum Decis. Met						Forum decisi meeting						20% Forum Decis. Met	
		4 Counc. Meet people						4 Coun meet the people						4 Counc. Meet people	
		PMS report						PMS report						PMS report	
2009/10 Annual Report															
		Performance reports to Council						Performance reports to Council						Performance reports to Council	
		Report on progr. Of IDP													
		All pol. Reviewed and completed													
Report on cus tomer care		Report on cus tomer care		Report on cus tomer care		Report on cus tomer care		Report on cus tomer care		Report on cus tomer care		Report on cus tomer care		Report on cus tomer care	
		Pol. Review & report													
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
report		report		report		report		report		report		report		report	
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
report		report		report		report		report		report		report		report	
2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings	
		Audit Com Meeting						Audit Com Meeting						Audit Com Meeting	
		Internal AR						Internal AR						Internal AR	
		BM Reports				BM Reports				BM Reports				BM Reports	

Month Ending Nov-08		Month Ending Dec-08		Month Ending Jan-09		Month Ending Feb-09		Month Ending Mar-09		Month Ending Apr-09		Month Ending May-09		Month Ending Jun-09	
Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
		Quarterly d/t report						Quarterly d/t report						Quarterly d/t report	
				Equity Report				Reviewed & report						Equity Report	
		Work Skills Plan Report													
		Training Completed												Training Completed	
		Meeting & Report						Meeting & Report						Meeting & Report	
		Meeting						Meeting						Meeting	
		Report				Report				Report				Report	
		H&S Schedule													
1 meeting per 4 wards				1 meeting per 4 wards		1 Meeting per 4 wards		1 meeting per 4 wards		1 Meeting per 4 wards		1 meeting per 4 wards		1 Meeting per 4 wards	
		IDP meeting				IDP meeting				IDP meeting					
				3 meetings on budget						3 meetings on budget					
		Public Consultat.				Public Consultat.				Public Consultat.				Public Consultat.	

RAAD: ALGEMENE UITGAWE				
VOTE - 0001	7 435 500	No of hours	Total hours per year	Breakdown per Rand
Government Grants and Subsidies			Expenses	Income
Equitable Share				635 130
Unknown receipts				-
SETA Funds and Unknown Receipts				-
Remuneration of councillors			2 380 840	
Employee related costs and Other Materials			649 500	
General expenses and Grants and Subsidies			5 040 290	
			8 070 630	635 130

Priority of targets/vote indicators	Percentage	Amounts Splited Expenditure	Amounts Splited Revenue
1	3.00%	R 242 119	R 19 054
2	3.00%	R 242 119	R 19 054
3	4.00%	R 322 825	R 25 405
4	13.00%	R 1 049 182	R 82 567
5	2.00%	R 161 413	R 12 703
6	13.00%	R 1 049 182	R 82 567
7	2.00%	R 161 413	R 12 703
8	10.00%	R 807 063	R 63 513
9	10.00%	R 807 063	R 63 513
10	10.00%	R 807 063	R 63 513
11	10.00%	R 807 063	R 63 513
12	5.00%	R 403 532	R 31 757
13	5.00%	R 403 532	R 31 757
14	5.00%	R 403 532	R 31 757
15	5.00%	R 403 532	R 31 757
	100%	**R 8 070 630**	**R 635 130**

Department- Office of the CFO
Amounts are stated in R 000

Vote/Indicator	Unit of measurement	Annual Target	Annual Expenses	Annual Revenue	Month Ending Jul-12		Month Ending Aug-12		Month Ending Sep-12		Month Ending Oct-12	
					Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
1. Ensure accurate and timeously reporting and planning	1. Monthly budget control, reconciliation of general ledger accounts and report accordingly	12	R 1 123 254	R 3 216 639	Monthly report		Monthly report		Monthly report		Monthly report	
	2. Submission of financial statistics to Sector Departments and financial institutions (DPLG, ABSA and Pixley ka Seme)	12	R 1 123 254	R 3 216 639	Monthly report		Monthly report		Monthly report		Monthly report	
	3. MFMA quarterly reports to Council, National Treasury and Provincial Treasury (MSIG, LTC, ME, MFM1, BM)	4	R 348 596	R 998 267					Quarterly report submitted			
	4. MFMA Section 11(4), 66 & 71 Reports (AC, AD, CAA, CFA, OSA) - FMG Monthly Reporting Loans and Investment Register Compilation - Monthly Reporting	12	R 1 123 254	R 3 216 639	Report submitted		Report submitted		Report submitted		Report submitted	
	5. Timeously submission of Mid-year report(S72) to Accounting Officer for revision & non-financial inputs. Accounting Officer to submit to Council. National and Provincial Treasury as per MFMA requirement	1	R 77 466	R 221 837								
	6. SDBIP developed - Deadline 31 March & 31 May Yearley - Quarterly Reporting	1	R 77 466	R 221 837								
2. To develop a compliant budget and financial statements in GAMAP/GRAP format	1. Timeously preparation and submission of Annual Financial Statements to Auditor General In newly accepted GRAP format	1	R 710 103	R 2 033 507			AFS submitted to AG					
	2. Compilation and preparation of Audit Working Paper File for External Auditors	1	R 710 103	R 2 033 507	Start Compiling		Submit AWPF					
	3. Preparation and development of draft & final budget (Accepted documents from Treasurt)	2	R 387 329	R 1 109 186			Submit Budget & IDP Key Deadlines to Council		Draft Budget WIP		Draft Budget WIP	
	3. Timeously approval of annual budget (final) as per required timeframe of the MFMA	1	R 387 329	R 1 109 186								
	4. Preparation and approval of Adjusted Budget	1	R 387 329	R 1 109 186								
3. Ensure effective capacity development and support in the financial unit	1. Approval of service level agreement and framework with specific time frames for financial management support and capacity building	80%	R 645 548	R 1 848 643	Approved Service L Agreement							
	2. Performance reviews conducted with Financial Personnel - Middle Management	4	R 645 548	R 1 848 643					Performance Report			
4. Establish and maintain financial systems and policies	1. Implement effective systems of revenue collection and safekeeping of data as per MFMA requirement	12	R 677 825	R 1 941 075	Monthly Report		Monthly Report		Monthly Report		Monthly Report	
	2. Ensure 100% collection and receipt of grant funding as per DoRA allocations	12	R 677 825	R 1 941 075	Monthly		Monthly		Monthly		Monthly	
	3. Annual review and implementation of approved credit control and debt collection policy	1	R 232 397	R 665 511	Review Policy							
	4. Develop & implement a Property Rates policy	1	R 232 397	R 665 511	Policy to be approved by Council 30 July 2010							
	5.Timeous payment of creditors based on the financial resources of the municipality	12	R 677 825	R 1 941 075	Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days	
	6. Preparation and implement a valuation role	1	R 232 397	R 665 511	Implemented June 2010 - On going		On going		On going		On going	
	7. Ensure improvement in internal control weaknesses identified-Internal and External Audit including answer of audit queries from both the AG and Shared Services-Int Audit	12	R 677 825	R 1 941 075	Monthly		Monthly		Monthly		Monthly	
	8. Annual review and development of other applicable revenue policies as required by the MFMA/and or other related policies	100%	R 232 397	R 665 511								
	9. Ensure recovery of consumer and sundry debt that has not yet been handed over to the Collecting Agency (Service Provider)	50%	R 232 397	R 665 511	Debts Recovered		Debts Recovered		Debts Recovered		Debts Recovered	
5. To ensure compliance with the MFMA and control over financial activities	1. Implement an effective system of expenditure control in compliance with MFMA requirements	12	R 542 260	R 1 552 860	Monthly Report		Monthly Report		Monthly Report		Monthly Report	
	2. Ensure implementation of the supply chain management regulations and approved policy with the assistance of all staff (Lower, Middle & Senior Managers) Monthly	1	R 542 260	R 1 552 860	Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report	
	3. Apply an effective cash fow and investment management system as per approved policy requirements and reconciliations	1	R 542 260	R 1 552 860	Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly	
	4. Establish an effective store and inventory system. Ask for proposals if the need arises and if value for money assertion is addressed.	1	R 542 260	R 1 552 860					Established			
	5. Annual review and development of applicable expenditure policies as required by the MFMA	1	R 77 466	R 221 837								
	6. Implement an effective system of asset and risk management in compliance with the MFMA (Asset Counts Monthly)	1	R 542 260	R 1 552 860					Established			
	7. Supervision over finance staff	12	R 542 260	R 1 552 860	Daily		Daily		Daily		Daily	
	8. Ensure 100% maintenance and security in respect of the general ledger accounting system (Service Provider)	12	R 542 260	R 1 552 860	Daily		Daily		Daily		Daily	
6. To effectively support internal political interfaces	1. Council committee meetings	12	R 516 438	R 1 478 914	1 coun comm meeting		1 coun comm meeting		1 coun comm meeting		1 coun comm meeting	
	2. Scheduled Council meetings with full preparation	12	R 516 438	R 1 478 914	1 Council meeting		1 Council meeting		1 Council meeting		1 Council meeting	
	3. Special Council meetings	6	R 258 219	R 739 457			1 Sp. Counc.				1 Sp. Counc.	
7. To effectively support external political interfaces	1. Council meets the people	16	R 516 438	R 1 478 914					4 Coun meet the people			
8. To ensure Performance Management and Reporting	1. Completion of 2011/12 Annual Report	1	R 645 548	R 1 848 643			2007/2008 Annual Report Approved by Council					
	2. Number of Management Performance Reports submitted to Municipal Manager	4	R 645 548	R 1 848 643					Performance reports to MM			
9. To ensure proper Leave Plannning within Department	1. Development and maintainance of Leave register to avoid leave bottle necks	1	R 516 438	R 1 478 914					Established			
10. To ensure punctuality of staff knocking in and out	1. Development and maintenance of proper attendance registers of staff	1	R 25 822	R 73 946	Monthly		Monthly		Monthly		Monthly	
	2. Attendance registers to be checked and verified by direct supervisor	18	R 116 199	R 332 756	Monthly		Monthly		Monthly		Monthly	
	3. Attendance registers to be approved by the Chief Financial Officer	18	R 116 199	R 332 756	Monthly		Monthly		Monthly		Monthly	
11. To ensure fair presentation of the annual financial statements by improving on the external audit opinions	1. Improve on the previous year's audit opinion (2010/11 financial year) received from the A-G.	65%	R 1 936 644	R 5 545 929								
	2. Development of an Audit Outcome Recovery Plan in relation to the audit qualifications identified in the external audit report received from AG with the assistance of Lower, Middle and Senior Management Staff.	1	R 645 548	R 1 848 643								
12. To ensure effective communication with staff members	1. HOD's Meetings	24	R 774 658	R 2 218 372	2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings	
	2. Finance staff - Middle Management Meetings	24	R 774 658	R 2 218 372	2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings	
	3. Staff meetings in various towns, Prieska, Marydale and Niekerkshoop	12	R 387 329	R 1 109 186	1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting	
13. To ensure proper Customer Care and improvement in service rendering by finance staff	1. Adherence and implementation of Customer Care Policy	75%	R 774 658	R 2 218 372					Established		Approved	
	2. Adherence to Batho Pele Principles by all staff	75%	R 774 658	R 2 218 372	Monthly		Monthly		Monthly		Monthly	
	3. Strategic Review Session with all Finance Staff	12	R 387 329	R 1 109 186	Monthly		Monthly		Monthly		Monthly	

Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending	
Nov-12		Dec-12		Jan-13		Feb-13		Mar-13		Apr-13		May-13		Jun-13	
Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
Monthly report		Monthly report		Monthly report		Monthly report		Monthly report		Monthly report		Monthly report		Monthly report	
Monthly report		Monthly report		Monthly report		Monthly report		Monthly report		Monthly report		Monthly report		Monthly report	
		Quarterly report submitted						Quarterly report submitted						Quarter report submitted	
Report submitted		Report submitted		Report submitted		Report submitted		Report submitted		Report submitted		Report submitted		Report submitted	
				Report submitted											
								SDBIP Draft Budget 25 March 2011				SDBIP Final Budget 27 May 2011			
Draft Budget WIP		Draft Budget WIP Departmental Inputs		Draft Budget WIP Departmental Inputs		Finalise Departmental Inputs		Draft Budget Approval 25 March 2011							
												Submit Final Budget for approval - 27 May 2011			
						Adjusted Budget approved									
Approved Service L Agreement								Approved Service L Agreement							
		Performance Report						Performance Report						Performance Report	
Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days		Pay Creditor within 30days	
On going		On going		On going		On going		On going		On going		On going		On going	
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
		Reviewed													
Debts Recovered		Debts Recovered		Debts Recovered		Debts Recovered		Debts Recovered		Debts Recovered		Debts Recovered		Debts Recovered	
Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report		Pol. & Reg SCM Monthly Report	
Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly		Cash/Invest Mng System Pol. & Recon's Monthly	
Implement															
Policies Reviewed								Policies Approved							
Implement															
Daily		Daily		Daily		Daily		Daily		Daily		Daily		Daily	
Daily		Daily		Daily		Daily		Daily		Daily		Daily		Daily	
1 coun comm		1 coun comm		1 coun comm		1 coun comm		1 coun comm		1 coun comm		1 coun comm		1 coun comm	
meeting		meeting		meeting		meeting		meeting		meeting		meeting		meeting	
1 Council		1 Council		1 Council		1 Council		1 Council		1 Council		1 Council		1 Council	
meeting		meeting		meeting		meeting		meeting		meeting		meeting		meeting	
		1 Sp. Counc.				1 Sp. Counc.				1 Sp. Counc.				1 Sp. Counc.	
		4 Counc. Meet people						4 Coun meet the people						4 Counc. Meet people	
2009/2010 Annual Report Approved by Council															
		Performance reports to MM						Performance reports to MM						Performance reports to MM	
Implement															
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
				Audit Outcome Recovery Plan Established											
2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings	
2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings	
1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting		1 X Staff Meeting	
Implement															
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	

FINANCE AND ADMIN				
VOTE - 0010	-100 000	No of hours	Total hours per year	Breakdown per Rand

	Expenses	Income
Administrasie Stadsekretaris Departement		
Other Income		100 000
Employee related costs	-	
Employee social contributions	-	
Repairs and maintenance	-	
Interest paid	-	
General expenses	-	
	-	**100 000**

FINANCE AND ADMIN				
VOTE - 0020	9 956 508	No of hours	Total hours per year	Breakdown per Rand

	Expenses	Income
Administrasie Tesourie Departement		
Penalties and collection charges		101 000
Interest on external investments/interest earned		350 000
Interest on arrears - debtors		320 000
Fines - Boetes op Hondebelasting		-
Government Grants and Subsidies:		**13 679 962**
Equitable share		10 945 962
MSIG		934 000
SETA Allocation		-
FMG		1 800 000
Other Income:		**1 066 950**
Other revenue received		1 000 000
Valuation certificates		16 000
Cash surplus		500
Research levy		450
Administration fees		50 000
Bad debt recoverable		-
Employee related costs	5 967 510	
Employee social contributions	790 000	
Depreciation and Collection costs	10 587 910	
Repairs and maintenance	300 000	
Interest paid - Bank overdraft and Transfers and Grants	2 784 000	
General expenses	5 045 000	
	25 474 420	**15 517 912**

FINANCE AND ADMIN				
VOTE - 0012	-60 000	No of hours	Total hours per year	Breakdown per Rand

	Expenses	Income
Behuising Personeelskema en Vote 4130		
Rental, facilities and equipment - Lease charges/Housing Leases (0024)		60 000
Repairs and maintenance	-	
General expenses:	**-**	
Administration costs	-	
Taxes	-	
Insurance	-	
	-	**60 000**

PUBLIC SAFETY				
VOTE - 0250	-	No of hours	Total hours per year	Breakdown per Rand

Lisensies en Verkeer	Expenses	Income
Fines - Court Fees and Traffic Violations		-
Licences and Permits		-
Income - Agency Services		-
Employee related costs	-	
Employee social contributions	-	
Repairs and Maintenance	-	
Interest paid	-	
General expenses	-	
	-	-

COMMUNITY AND SOCIAL SERVICES				
VOTE - 1150	-	No of hours	Total hours per year	Breakdown per Rand

Biblioteke	Expenses	Income
Grants and Subsidies:		-
Library development		-
Library other		-
Employee related costs	-	
Employee social contributions	-	
Repairs and Maintenance	-	
General expenses	-	
	-	-

OVERALL TOTALS - INCOME	73 945 722
OVERALL TOTALS - EXPENDITURE	25 821 920

Priority of targets/vote indicators	Percentage	Amounts Splited Expenditure	Amounts Splited Revenue
1	15.00%	R 3 873 288	R 11 091 858
2	10.00%	R 2 582 192	R 7 394 572
3	5.00%	R 1 291 096	R 3 697 286
4	15.00%	R 3 873 288	R 11 091 858
5	15.00%	R 3 873 288	R 11 091 858
6	5.00%	R 1 291 096	R 3 697 286
7	2.00%	R 516 438	R 1 478 914
8	5.00%	R 1 291 096	R 3 697 286
9	2.00%	R 516 438	R 1 478 914
10	1.00%	R 258 219	R 739 457
11	10.00%	R 2 582 192	R 7 394 572
12	7.50%	R 1 936 644	R 5 545 929
13	7.50%	R 1 936 644	R 5 545 929
	100.00%	R 25 821 920	R 73 945 722

FINANCE AND ADMIN				
VOTE - 0022	-8 024 972	No of hours	Total hours per year	Breakdown per Rand

Eiendomsbelasting	Expenses	Income
Property rates (Including Government Grant and Subsidies (State Property Rates)		8 024 972
	-	-
General expenses	-	-
	-	**8 024 972**

FINANCE AND ADMIN				
VOTE - 0023	-255 000	No of hours	Total hours per year	Breakdown per Rand

Meent	Expenses	Income
Rental, facilities and equipment - lease charges		300 000
Other income		5 000
Repairs and maintenance	-	
General expenses	50 000	-
	50 000	**305 000**

FINANCE AND ADMIN				
VOTE - 0060	-102 500	No of hours	Total hours per year	Breakdown per Rand

Munisipale Geboue en Kantore	Expenses	Income
Rental, facilities and equipment - Lease charges and Sale of Municipal Assets		400 000
Repairs and maintenance	-	
General expenses:	**297 500**	
Sale of municipal assets	-	
General repairs	297 500	
Licensing	-	
Sanitation and Sewerage	-	
Insurance	-	
Water	-	
Radio license	-	
	297 500	**400 000**

TECHNICAL DEPARTMENT				
VOTE - 0115	-53 000	No of hours	Total hours per year	Breakdown per Rand

Begraafplaas	Expenses	Income
Other income and lease charges other		53 000
Repairs and maintenance	-	
General expenses	-	
	-	**53 000**

TECHNICAL DEPARTMENT				
VOTE - 0150	-	No of hours	Total hours per year	Breakdown per Rand

Brandweer	Expenses	Income
Other income		-
Repairs and maintenance	-	
General expenses	-	
	-	-

TECHNICAL DEPARTMENT				
VOTE - 0165	-	No of hours	Total hours per year	Breakdown per Rand

Noodrampbestuur	**Expenses**	**Income**
Other income		-
Repairs and maintenance	-	
General expenses	-	
	-	-

TECHNICAL DEPARTMENT				
VOTE - 0140	-	No of hours	Total hours per year	Breakdown per Rand

Kampeerterreine	**Expenses**	**Income**
Rental, facilities and equipment		-
Repairs and maintenance and employee related costs	-	
General expenses	-	
	-	-

TECHNICAL DEPARTMENT				
VOTE - 0200	-1 105 000	No of hours	Total hours per year	Breakdown per Rand

Openbare Werke	**Expenses**	**Income**
Rental, facilities and equipment		80 000
Other Income & Government Grants and Subsidies		1 025 000
Employee related costs	-	
Employee social contributions	-	
Repairs and maintenance	-	
Interest paid	-	
General expenses	-	
	-	**1 105 000**

TECHNICAL DEPARTMENT				
VOTE - 0141	-	No of hours	Total hours per year	Breakdown per Rand

Parke en Ontspanningsterreine	**Expenses**	**Income**
Other Income		-
Employee related costs	-	
Employee social contributions	-	
Repairs and maintenance	-	
Interest paid	-	
General expenses	-	
	-	-

TECHNICAL DEPARTMENT				
VOTE - 0390	-4 237 168	No of hours	Total hours per year	Breakdown per Rand

Reinigingsdienste	**Expenses**	**Income**
Service charges		2 500 000
Government Grants and Subsidies - Equitable Share		1 677 168
Other Income - Gardenrefuse and Garbage		60 000
Employee related costs	-	
Employee social contributions	-	
Bad debt - Provision for bad debt	-	
Repairs and maintenance	-	
Grants and Subsidies - Free basic services	-	
General expenses	-	
	-	**4 237 168**

TECHNICAL DEPARTMENT				
VOTE - 0360	-11 411 614	No of hours	Total hours per year	Breakdown per Rand

Riool	**Expenses**	**Income**
Service charges		7 599 150
Government Grants and Subsidies - Equitable Share		3 812 464
Other Income		-
Employee related costs	-	
Employee social contributions	-	
Bad debt - Provision for bad debt	-	
Repairs and maintenance	-	
Grants and Subsidies - Free basic services	-	
General expenses	-	
	-	**11 411 614**

TECHNICAL DEPARTMENT				
VOTE - 0400	-	No of hours	Total hours per year	Breakdown per Rand

Vliegveld	**Expenses**	**Income**
Other Income		-
Repairs and maintenance	-	
General expenses	-	
	-	**-**

TECHNICAL DEPARTMENT				
VOTE - 0300	-21 741 042	No of hours	Total hours per year	Breakdown per Rand

Elektrisiteitsdiens	**Expenses**	**Income**
Service charges		19 517 202
Government Grants and Subsidies - Equitable Share		2 118 840
Other Income		105 000
Employee related costs	-	
Employee social contributions	-	
Bad debt - Provision for bad debt	-	
Repairs and maintenance	-	
Interest paid	-	
Bulk purchases	-	
Grants and Subsidies - Free basic services	-	
General expenses	-	
	-	**21 741 042**

TECHNICAL DEPARTMENT				
VOTE - 0340	-10 990 014	No of hours	Total hours per year	Breakdown per Rand

Waterdiens	**Expenses**	**Income**
Service charges		8 946 308
Government Grants and Subsidies - Equitable Share		1 981 706
Other Income - Charges for in/re-installation		62 000
Employee related costs	-	
Employee social contributions	-	
Bad debt - Provision for bad debt	-	
Repairs and maintenance	-	
Interest paid	-	
Bulk purchases	-	
Grants and Subsidies - Free basic services	-	
General expenses	-	
	-	**10 990 014**

Department: Office of the Technical Manager
Amounts are stated in R 000

Vote/Indicator	Unit of measurement	Annual Target	Annual Expenses	Annual Revenue	Month Ending Jul-12		Month Ending Aug-12		Month Ending Sep-12		Month Ending Oct-12	
					Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
1. Provision of services	**1. Supervision over all technical staff**											
	Cemetary	**0**	**13 500**	-	1 125.00	1 125.00	1 125.00	1 125.00	1 125.00	1 125.00	2 941.67	2 941.67
	Fire Brigade	**0**	**6 000**	-	500.00	500.00	500.00	500.00	500.00	500.00	1 902.92	1 902.92
	Disaster Management	**0**	**20 000**	-	1 666.67	1 666.67	1 666.67	1 666.67	1 666.67	1 666.67	6 666.67	6 666.67
	Camping Sites and Parksd and Recreation	**0**	**2 326 648**	-	193 887.33	193 887.33	193 887.33	193 887.33	193 887.33	193 887.33	102 828.00	102 828.00
	Public Works	**28**	**15 381 236**	-	1 281 769.67	1 281 769.67	1 281 769.67	1 281 769.67	1 281 769.67	1 281 769.67	461 888.67	461 888.67
	Refuse Removal	**18**	**6 007 428**	-	500 619.00	500 619.00	500 619.00	500 619.00	500 619.00	500 619.00	329 186.83	329 186.83
	Sewerage	**23**	**8 360 388**	-	696 699.00	696 699.00	696 699.00	696 699.00	696 699.00	696 699.00	248 940.67	248 940.67
	Airport and Health	**0**	**10 000**	-	833.33	833.33	833.33	833.33	833.33	833.33	4 677.17	4 677.17
	Electricity	**6**	**22 529 770**	-	1 877 480.83	1 877 480.83	1 877 480.83	1 877 480.83	1 877 480.83	1 877 480.83	668 178.67	668 178.67
	Water	**13**	**8 105 746**	-	675 478.83	675 478.83	675 478.83	675 478.83	675 478.83	675 478.83	399 576.50	399 576.50
2. Eradicate backlogs in infrastructure	1. Provide household with potable water	**0 sites**	-	-	0		0		0		0	
	2. Number of town establishment completed project	**0 sites**	-	-	0		0					
3. Provision of sustainable basic services	1. Provide basic sanitation to households	**0 sites**	-	-	0		0					
	2. Provide basic electricity to households	**0 sites**	-	-	0		0					
	3. Provide basic water to households	**0 sites**	-	-	Completed		0					
4. Provision of bulk and land services	1. Construction of refuse site and water reticulation	**1 each**	**4 562 000**	**4 562 000**	380 167	380 167	380 000	380 000	380 000	380 000	380 000	380 000
	2. Expansion and provision of new cemetries	**3 Towns**	**2 594 000**	**2 594 000**	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167
4.1 EPWP	3. EPWP	**EPWP Projects**	**1 000 000**	**1 000 000**	72500	72500	72500	72500	72500	72500	72500	72500
5. Maintenance of public facilities	1. Maintenance of electricity networks	**Prieska**		-	Prieska		Prieska		Prieska		Prieska	
	2. Bulk purchase of electricity	**Prieska**			Prieska		Prieska		Prieska		Prieska	
	3. Free basic electricity	**2211**		-	2211		2211		2211		2211	
	4. Maintenance of purification plants & reticulation	**44016**		-	3668		3668		3668		3668	
	5. Bulk purchases of water	**Prieska**		-	Prieska		Prieska		Prieska		Prieska	
	6. Free basic water	**2211**		-	2211		2211		2211		2211	
	7. Maintenance of recreation, parks & sport facilities	**5**		-	5		5		5		5	
	8. Maintenance of council buildings	**12**		-	12		12		12		12	
	9. Maintenance of Cemetaries	**4**		-	4		4		4		4	
	10. Maintenance of Libraries	**4**		-	4		4		4		4	
	11. Maintenance of Commonage Land	**33000hect**		-	33000hect		33000hect		33000hect		33000hect	
	12. Maintenance of fire brigade	**1**		-	1		1		1		1	
	13. Disaster Management	**3 towns**		-	3towns		3 towns		3 towns		3 towns	
	14. Maintenance of Airport	**1**		0	1		1		1		1	

Vote/Indicator	Unit of measurement	Annual Target	Annual Expenses	Annual Revenue	Month Ending Jul-08		Month Ending Aug-08		Month Ending Sep-08		Month Ending Oct-08	
					Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
6. Waste Management	1. Deliver of refuse removal service	3 towns		0	3 towns		3 towns		3 towns		3 towns	
	2. Free basic refuse removal	2211		0	2211		2211		2211		2211	
	3. Deliver of sewerage & sanitation	3 towns		0	3 towns		3 towns		3 towns		3 towns	
	4. Free basic sewerage & sanitation	2211		0	2211		2211		2211		2211	
7. Planning and Strategies	1. Develop a water strategy and management pla	1 Plan	DWAF will assist	0	0		0		0		0	
	2. Develop a Spatial Development Framework & Plar	1 Plan	0	0	0		0		0		0	
8. Transport Management	1. Maintenance of municipal roads	88 km	0	0	88 km		88 km		88 km		88 km	
9. Housing delivery and land development		0	0	0	0		0		0		0	
10. To ensure effective communication with st members	1. HOD's Meetings	24										
	2. Technial staff - Middle Management Meeting	24										
	3. Staff meetings in various towns, Prieska, Marydale and Niekerkshoo	12										

Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending		Month Ending	
Nov-12		Dec-12		Jan-13		Feb-13		Mar-13		Apr-13		May-13		Jun-13	
Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67	2 941.67
1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92	1 902.92
6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67	6 666.67
102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00	102 828.00
461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67	461 888.67
329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83	329 186.83
248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67	248 940.67
4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17	4 677.17
668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67	668 178.67
399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50	399 576.50
0		0		0		0		0		0		0		0	
380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000	380 000
216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167	216 167
72500	72500	72500	72500	72500	72500	72500	72500	72500	72500	72500	72500	72500	72500	72500	72500
Prieska		Prieska		Prieska		Prieska		Prieska		Prieska		Prieska		Prieska	
Prieska		Prieska		Prieska		prieska		Prieska		Prieska		Prieska		Prieska	
2211		2211		2211		2211		2211		2211		2211		2211	
3668		3668		3668		3668		3668		3668		3668		3668	
Prieska		Prieska		Prieska		Prieska		Prieska		Prieska		Prieska		Prieska	
2211		2211		2211		2211		2211		2211		2211		2211	
5		5		5		5		5		5		5		5	
12		12		12		12		12		12		12		12	
4		4		4		4		4		4		4		4	
4		4		4		4		4		4		4		4	
33000hect		33000hect		33000hect		33000hect		33000hect		33000hect		33000hect		33000hect	
1		1		1		1		1		1		1		1	
3 towns		3 towns		3 towns		3 towns		3 towns		3 towns		3 towns		3 towns	
1		1		1		1		1		1		1		1	

TECHNICAL DEPARTMENT				
VOTE - 0115	13 500	No of hours	Total hours per year	Breakdown per Rand
Begraafplaas			**Expenses**	**Income**
Other income				-
Repairs and maintenance			10 000	
General expenses			3 500	
			13 500	-

TECHNICAL DEPARTMENT				
VOTE - 0150	6 000	No of hours	Total hours per year	Breakdown per Rand
Brandweer			**Expenses**	**Income**
Other income				-
Repairs and maintenance			6 000	
General expenses			-	
			6 000	-

TECHNICAL DEPARTMENT				
VOTE - 0165	20 000	No of hours	Total hours per year	Breakdown per Rand
Noodrampbestuur			**Expenses**	**Income**
Other income				-
Repairs and maintenance			20 000	
General expenses				
			20 000	-

TECHNICAL DEPARTMENT				
VOTE - 0140	7 900	No of hours	Total hours per year	Breakdown per Rand
Kampeerterreine			**Expenses**	**Income**
Rental, facilities and equipment				-
Repairs and maintenance			1 500	
General expenses			6 400	
			7 900	-

TECHNICAL DEPARTMENT				
VOTE - 0200	15 381 236	No of hours	Total hours per year	Breakdown per Rand
Openbare Werke			**Expenses**	**Income**
Rental, facilities and equipment				-
Other Income				-
Employee related costs			5 844 767	
Employee social contributions			854 270	
Others materials (Transport, General repairs & Vehicle			7 640 000	
Interest paid			515 199	
General expenses			527 000	
			15 381 236	-

TECHNICAL DEPARTMENT				
VOTE - 0141	2 318 748	No of hours	Total hours per year	Breakdown per Rand
Parke en Ontspanningsterreine			**Expenses**	**Income**
Other Income				-
Employee related costs			1 882 002	
Employee social contributions			322 896	
Repairs and maintenance			45 000	
Interest paid			-	
General expenses			68 850	
			2 318 748	-

TECHNICAL DEPARTMENT				
VOTE - 0390	6 007 428	No of hours	Total hours per year	Breakdown per Rand
Reinigingsdienste			**Expenses**	**Income**
Service charges				-
Government Grants and Subsidies - Equitable Shar				-
Other Income - Gardenrefuse and Garbag				-
Employee related costs			3 110 767	
Employee social contributions			512 309	
Bad debt - Provision for bad debt & Interest Pai			266 250	
Repairs and maintenance			335 000	
Grants and Subsidies - Free basic services			-	
General expenses			1 783 102	
			6 007 428	-

Month Ending Nov-08		Month Ending Dec-08		Month Ending Jan-09		Month Ending Feb-09		Month Ending Mar-09		Month Ending Apr-09		Month Ending May-09		Month Ending Jun-09	
Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
3 towns		3 towns		3 towns		3 towns		3 towns		3 towns		3 towns		3 towns	
2211		2211		2211		2211		2211		2211		2211		2211	
3 towns		3 towns		3 towns		3 towns		3 towns		3 towns		3 towns		3 towns	
2211		2211		2211		2211		2211		2211		2211		2211	
0		0		0		0		1		0		0		0	
0		0		0		0		1		0		0		0	
88 km		88 km		88 km		88 km		88 km		88 km		88 km		88 km	
0		0		0		0		0		0		0		0	

TECHNICAL DEPARTMENT

VOTE - 0360	8 360 388	No of hours	Total hours per year	Breakdown per Rand

Riool	**Expenses**	**Income**
Service charges		-
Government Grants and Subsidies - Equitable Share		-
Other Income		-
Employee related costs	2 757 914	
Employee social contributions	385 550	
Bad debt - Provision for bad debt	657 210	
Repairs and maintenance	530 000	
Grants and Subsidies - Free basic services	-	
General expenses	4 029 714	
	8 360 388	**-**

TECHNICAL DEPARTMENT

VOTE - 0400	10 000	No of hours	Total hours per year	Breakdown per Rand

Vliegveld	**Expenses**	**Income**
Other Income		-
Repairs and maintenance	10 000	
General expenses		
	10 000	**-**

TECHNICAL DEPARTMENT

VOTE - 0300	20 194 770	No of hours	Total hours per year	Breakdown per Rand

Elektrisiteitsdiens	**Expenses**	**Income**
Service charges		-
Government Grants and Subsidies - INEF		2 335 000
Other Income		-
Employee related costs	1 915 735	
Employee social contributions	304 073	
Bad debt - Provision for bad debt	493 620	
Repairs and maintenance	775 000	
Interest paid	191 552	
Bulk purchases	16 683 950	
Grants and Subsidies - Free basic services & INEF	2 118 840	
General expenses	47 000	
	22 529 770	**2 335 000**

TECHNICAL DEPARTMENT

VOTE - 0190	-	No of hours	Total hours per year	Breakdown per Rand

Gesondheid	**Expenses**	**Income**
Other Income		-
Repairs and maintenance	-	
General expenses	-	
	-	**-**

Totals	**62 760 716**	**24 505 000**

TECHNICAL DEPARTMENT

VOTE - 0340	5 235 746	No of hours	Total hours per year	Breakdown per Rand

Waterdiens	**Expenses**	**Income**
Service charges		-
Transfers recognised - Capital (DWAF)		2 870 000
Other Income - Charges for in/re-installation		-
Employee related costs	3 145 870	
Employee social contributions	455 000	
Bad debt - Provision for bad debt	39 920	
Repairs and maintenance	601 000	
DWAF - Funds Expenditure	-	
Bulk purchases	800 000	
Grants and Subsidies - Free basic services	-	
General expenses	3 063 956	
	8 105 746	**2 870 000**

TECHNICAL DEPARTMENT

VOTE - CAPITAL	-5 291 625	No of hours	Total hours per year	Breakdown per Rand

Capital funding by source	**Expenses**	**Income**
National Government - Amounts allocated for the year (MIG		11 800 000
Other Revenue - Capital		6 500 000
Capital expenditure by Vote and Other Capital	13 008 375	
Planning and Development	-	
Waste Water (Refuse Site)	-	
Water reticulation	-	
	13 008 375	**18 300 000**

TECHNICAL DEPARTMENT

VOTE - EPWP	-	No of hours	Total hours per year	Breakdown per Rand

EPWP	**Expenses**	**Income**
EPWP	1 000 000	1 000 000
	1 000 000	**1 000 000**

TECHNICAL DEPARTMENT

VOTE - 0230	-	No of hours	Total hours per year	Breakdown per Rand

Hoofpaaie	**Expenses**	**Income**
Harambee - Construction	-	-
	-	**-**

Department: Corporate Services
Amounts are stated in R 000

Vote/Indicator	Unit of measurement	Annual Target	Annual Expenses	Annual Revenue	Month Ending Jul-12		Month Ending Aug-12		Month Ending Sep-12		Month Ending Oct-12		Month Ending Nov-12		Month Ending Dec-12		Month Ending Jan-13		Month Ending Feb-13		Month Ending Mar-13		Month Ending Apr-13		Month Ending May-13		Month Ending Jun-13	
					Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual	Proj	Actual
1. To ensure Performance Management and Reporting	1. Develop and Implement PMS	1	R 343 455	R 68 300					Dev & Impl																			
	2. Monitoring and Reporting on PMS	4	R 343 455	R 68 300					Mon & Rep						Mon & Rep						Mon & Rep						Mon & Rep	
	3. Completion of 2011/12 Annual Reports	1	R 343 455	R 68 300							2006/07 Annual Report						2007/08 Annual report											
	4. Number of Management Performance Reports submitted to MM	4	R 343 455	R 68 300					Performance reports to MM						Performance reports to MM						Performance reports to MM						Performance reports to MM	
2. Human Resource Management/Development	1. Review, report and implementation of Workplace Skills Plan	1	R 63 497	R 12 240											Work Skills Plan Report													
	2. % Implementation of Training Plan	100%	R 63 497	R 12 240							Training Completed																	
	3. Review and Approve Organogram	1	R 63 497	R 12 240					Reviewed & approved																			
	4. Review and report on Equity Plan	4	R 63 497	R 12 240	Reviewed & report						Equity Report						Equity Report				Reviewed & report						Equity Report	
	5. Learnership Programme/Monitoring	6	R 63 497	R 12 240			Quarterly Monitoring				Quarterly Monitoring				Quarterly				Quarterly Monitoring				Quarterly Monitoring				Quarterly Monitoring	
3. Labour Relations	1. Dispute Resolutions	Cont.	R 79 259	R 15 300	Cont.																							
	2. Local Labour Forum Meetings	4	R 158 518	R 30 600					Meeting & Report						Meeting & Report						Meeting & Report						Meeting & Report	
	3. Disciplinary Cases Reported & Completed	100%	R 79 259	R 15 300	As required								1		1		1		1									
4. Ensure Effective Administrative Management and Internal Controls	1. Job Descriptions/Review	1	R 264 197	R 51 000							Review																	
	2. Policies and by laws to be added or drafted	Ongoing	R 264 197	R 51 000	Ongoing																							
	3. Implementation of Policies and By Laws	Ongoing	R 264 197	R 51 000	Ongoing																							
	4. Administration of all Policies and Procedures	1	R 264 197	R 51 000											Policies and Procedures													
	5. Advertisements of all Vacancies & Notices	As needed	R 264 197	R 51 000	As needed																							
	6. Compliance to targets set for the corporate services	100%	R 528 393	R 102 000	Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
	7. Monthly Departmental reports	12	R 264 197	R 51 000	Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
	8. HOD Meetings	24	R 264 197	R 51 000	2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings		2 X HOD Meetings	
	9. Annual leave planning and control	1	R 264 197	R 51 000																							Planning and Control	
5. Departmental Meetings with staff members	1. Corporate staff - Middle Management Meetings	24	R 211 357	R 40 800	2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings		2 X MM Meetings	
6. Ensure effective planning and project management	1. Review and approval of LED Strategy	100%	R 105 679	R 20 400					LED strat adopted																			
	2. Align of EM Spatial Development Framework	100%	R 105 679	R 20 400					SDF all. with EM																			
7. Ensure Road Safety	1. Testing of Learners	1500	R 838 298	R 162 540	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
	2. Testing of Drivers Licence	250	R 158 518	R 30 600	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
	3. Speed Traps TVS	750	R 475 594	R 91 800	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
	4. Road Marking Signs	20	R 15 852	R 3 060					Quarterly						Quarterly						Quarterly						Quarterly	
8. Ensure proper environmental programmes are undertaken and implemented	1. Maintenance and cleanliness of community halls	24	R 158 518	R 30 600	2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month		2 X Maintenance a month	
	2. Establishment of cleaning street committees in order for cleaner wards	24	R 158 518	R 30 600	2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month		2 X Cleaner Wards a month	
9. Ensure effective capacitation programmes are implemented	1. Youth development	12	R 126 814	R 24 480	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
	2. Capacitation of SMME's	12	R 63 497	R 12 240	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
	3. Councillor and staff capacitation on project management	12	R 126 814	R 24 480	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
10. Ensure proper implementation of traffic by-laws	1. Traffic officers to report on the implementation of law enforcements and by laws of the municipality	100%	R 317 036	R 61 200	Daily		Daily		Daily		Daily		Daily		Daily		Daily		Daily		Daily		Daily		Daily		Daily	
11. Public Participation and Good Governance	1. Number of Ward Committees Meetings held (monthly)	44	R 264 197	R 51 000	1 meeting per 4 wards		1 Meeting per 4 wards		1 meeting per 4 wards		1 Meeting per 4 wards		1 meeting per 4 wards		1 meeting per 4 wards		1 meeting per 4 wards		1 Meeting per 4 wards		1 meeting per 4 wards		1 meeting per 4 wards		1 meeting per 4 wards		1 Meeting per 4 wards	
	2. Number of IDP Rep meetings	4	R 52 839	R 10 200					IDP meeting						IDP meeting						IDP meeting		IDP meeting					
	3. Number of Budget Consultation meetings	6	R 52 839	R 10 200													3 meetings on budget						3 meetings on budget			
	4. Other Public Consultation sessions	6	R 52 839	R 10 200			Public Consultat				Public Consultat				Public Consultat				Public Consultat				Public Consultat				Public Consultat	
	5. IDP Steering Committee	12	R 52 839	R 10 200	1 meeting		1 Meeting		1 meeting		1 Meeting		1 meeting				1 meeting		1 Meeting		1 meeting		1 Meeting		1 meeting		1 Meeting	
	6. Provide Inst Capability to impl LED programs and training	100%	R 52 839	R 10 200							LED Programs and Training Established				LED Programs and Training Implemented													
12. Library Services	1. Maintain Effective Library Services	100%	R 581 232	R 112 200	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
	2. Monthly reports	12	R 581 232	R 112 200	Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report		Monthly Report	
13. Archival Systems	1. Maintenance of Archival Systems	12	R 317 036	R 61 200	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
	2. Develop an Electronic mechanism for Distributing Compiling of Council Meeting Documents	12	R 317 036	R 61 200	Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly		Monthly	
14. Legal Commitments & Contracts	1. Establish all Contracts/Contract Management	Cont.	R 322 036	R 61 200	Cont.																							
	2. Monitor all Contracts (Drafting, re-viewing, implementation and compliance)	Cont.	R 322 036	R 61 200	Cont.																							

PUBLIC SAFETY				
VOTE - 0030	246 560	No of hours	Total hours per year	Breakdown per Rand
Lisensies en Verlae:			Expenses	Income
Fines - Court Fees and Traffic Violations				80 000
Licences and Permits				5 000
Income - Agency Services				1 265 000
Employee related costs			1 138 583	
Employee social contributions			167 000	
Repairs and Maintenance			200 000	
Interest paid			-	
General expenses			73 000	
			1 578 583	1 350 000

COMMUNITY AND SOCIAL SERVICES				
VOTE - 0100	980 736	No of hours	Total hours per year	Breakdown per Rand
Biblioteke			Expenses	Income
Grants and Subsidies:				690 000
Library development - Transfers Recognised - Operational				689 000
Library other & Fines				1 000
Employee related costs			823 000	
Employee social contributions			170 000	
Transfers and Grants			689 000	
General expenses and Other Materials			49 758	
			1 679 758	690 000

FINANCE AND ADMIN				
VOTE - 0010	6 782 523	No of hours	Total hours per year	Breakdown per Rand
			Expenses	Income
Administrasie Stadsbeheerde Departement				
Other Income				
Employee related costs			3 525 905	
Employee social contributions			486 568	
Repairs and maintenance (Other Materials)			265 000	
Interest paid			-	
General expenses			2 585 050	
			6 782 523	-

FINANCE AND ADMIN				
VOTE - 0023	55 000	No of hours	Total hours per year	Breakdown per Rand
Huurd			Expenses	Income
Rental, facilities and equipment - lease charges				
Other income				
Repairs and maintenance			55 000	
General expenses			-	
			55 000	-

FINANCE AND ADMIN				
VOTE - 0060	463 005	No of hours	Total hours per year	Breakdown per Rand
Municipale Geboue en Kantore			Expenses	Income
Rental, facilities and equipment - Lease charges				
Repairs and maintenance (Other Materials)			300 000	
General expenses:			163 005	
Alarm			30 000	
Electricity			80 505	
Licensing			10 000	
Sanitation and Sewerage			5 500	
Insurance			-	
Water			17 000	
Radio license			-	
			463 005	-

FINANCE AND ADMIN				
VOTE - 1120		No of hours	Total hours per year	Breakdown per Rand
			Expenses	Income
Administrasie Tesourie Departement				
Penalties and collection charges				-
Interest on external investments				-
Interest on arrears - debtors				-
Fines - Boetes op Hondebetasting				-
Government Grants and Subsidies:				-
Equitable share				-
MSIG				-
SETA Allocation				-
FMG				-
Other Income:				-
Administration fees				-
Valuation certificates				-
Cash surplus				-
Research levy				-
Allocation support services				-
Bad debt recoverable				-
				-
Employee related costs			-	-
Employee social contributions			-	-
Depreciation			-	-
Repairs and maintenance			-	-
Interest paid			-	-
General expenses			-	-
			-	-

FINANCE AND ADMIN				
VOTE - 0024 & 0012	10 000	No of hours	year	Breakdown per Rand
Behuising Personeelkamp			Expenses	Income
Rental, facilities and equipment - Lease charges				
Repairs and maintenance			10 000	
General expenses:			-	
Administration costs			-	
Taxes			-	
Insurance			-	
			10 000	

OVERALL TOTALS - INCOME	**3 948 000**
OVERALL TOTALS - EXPENDITURE	**10 567 861**

Priority of Begrotingsfunksie Indicators	Percentage	Amounts Spilted Expenditure	Amounts Spilted Revenue
1	3.58%	R 378 833	R 280 200
2	3.00%	R 317 536	R 61 200
3	3.00%	R 317 536	R 61 200
4	25.00%	R 2 641 965	R 510 000
5	2.00%	R 211 357	R 40 800
6	2.00%	R 211 357	R 40 800
7	15.00%	R 1 588 179	R 306 000
8	3.00%	R 317 536	R 61 200
9	3.00%	R 317 536	R 61 200
10	3.00%	R 317 536	R 61 200
11	5.00%	R 528 393	R 102 000
12	11.00%	R 1 162 465	R 224 400
13	6.00%	R 634 072	R 122 400
14	6.00%	R 646 072	R 122 400
	100%	R 10 577 861	R 2 040 000

Housing Plan
Data Collection & Project Readiness

Basis for providing sustainable Housing infrastructure

Version 3
Compile 2012
Siyathemba Municipality
Code NC077
Reviewed Date : May 2012

Notes

This version of the template serves to clarify the calculated assessment of the infrastructure needs for this municipality. The following applies:

The following applies:

a Senopsis / Project Readiness
b Prieska outlay
c Marydale outlay
d Niekershoop outlay

MUNICIPALITY	HOUSING NEED	NUMBER OF SITES AVAILABLE FOR 2010/11	NUMBER OF SITES SERVICED (SANITATION)	NUMBER OF SITES SERVICED (WATER)	ELECTRICITY	TOWNSHIP ESTABLISHMENT	EIA REPORT AVAILABLE	GEOTECH REPORT AVAILABLE	ALLOCATIONS FOR 2010/11	HOUSES TO BE BUILD 2010/11	NO OF SITES TO BE PLANNED	NO. OF SITES TO BE SERVICED 2010/11	REMAINING SITES READY FOR HOUSING 2010/11	ADDITIONAL SITES READY FOR SERVICING	INCLUDED IN IDP	Additional Funding Reqd. for Houses	Additional Funding Reqd. for Services	Total Additional Funding Reqd.
SIYATHEMBA	**3 502**	**642**	**0**	**0**					**R 0.00**	**12**	**2860**	**3502**	**642**	**642**	Yes	**R 34 992 852.00**	**12 840 000.00**	**47 832 852.00**
Marydale	1 292	115	0	0		within establishment	yes for surveyed sites	yes for surveyed sites	R 0.00	**12**	461	1292	115	115	Yes			
Niekerkeshoop	521	60	0	0		within establishment	yes for surveyed sites	yes for surveyed sites	R 0.00	0	1177	521	60	60	Yes			
Prieska	1 689	467	0	0		within establishment	yes for surveyed sites	yes for surveyed sites	R 0.00	0	1222	1689	467	467	Yes			

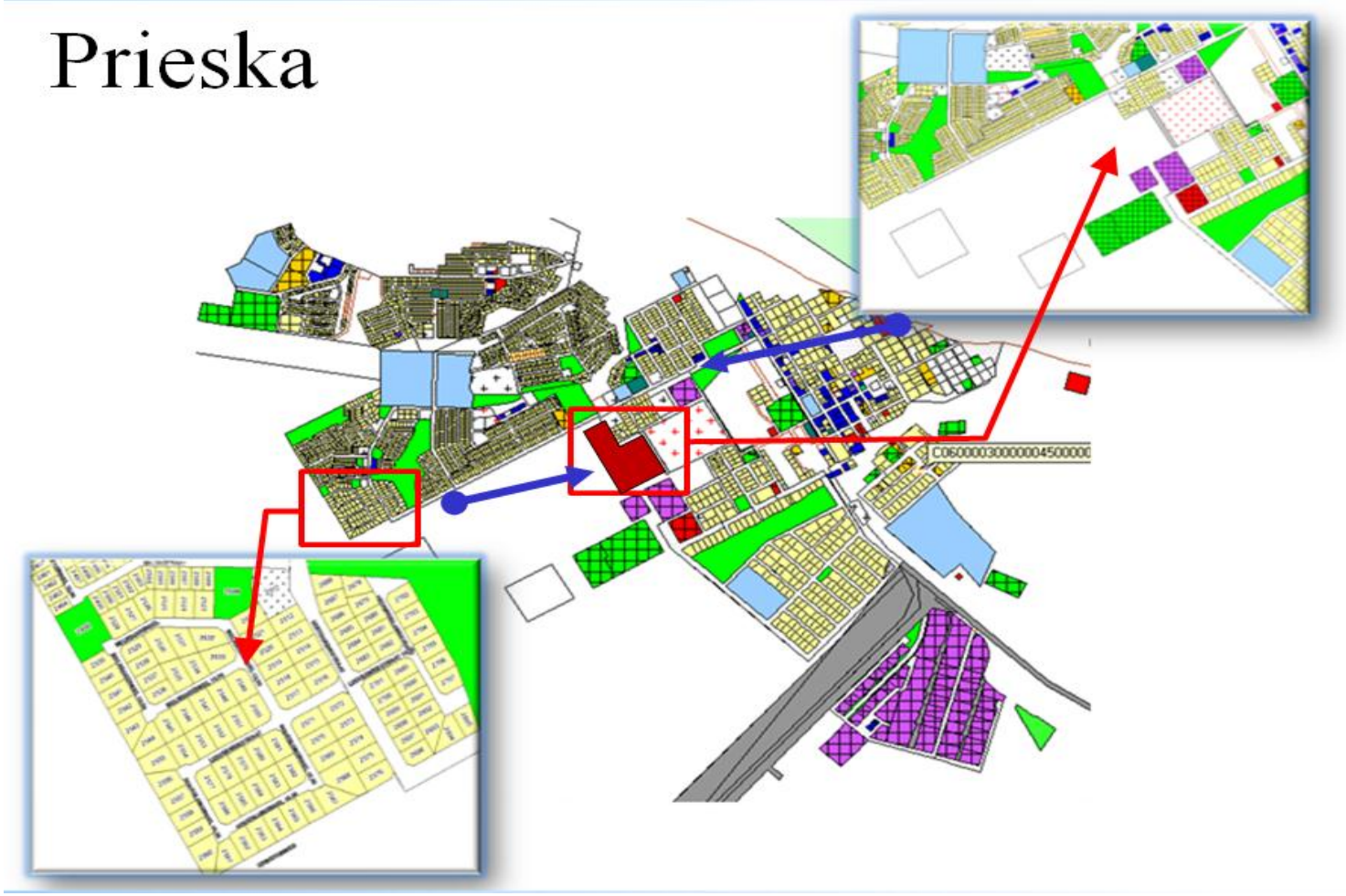
Not clear on the figures

	2008 - 2009			2010 - 2011			Totaal
	Prieska	Marydale	Niekerkshoop	Prieska	Marydale	Niekerkshoop	
Planned Sites	269	115	60	467	115	60	642
Available sites without services	269	115	60	467	115	60	642
Serveyed sites without bulk services	250	44	110	-	-	-	0
Total need	687	320	218	1002	972	303	**2277**
Total need	1689	1292	521				**3502**

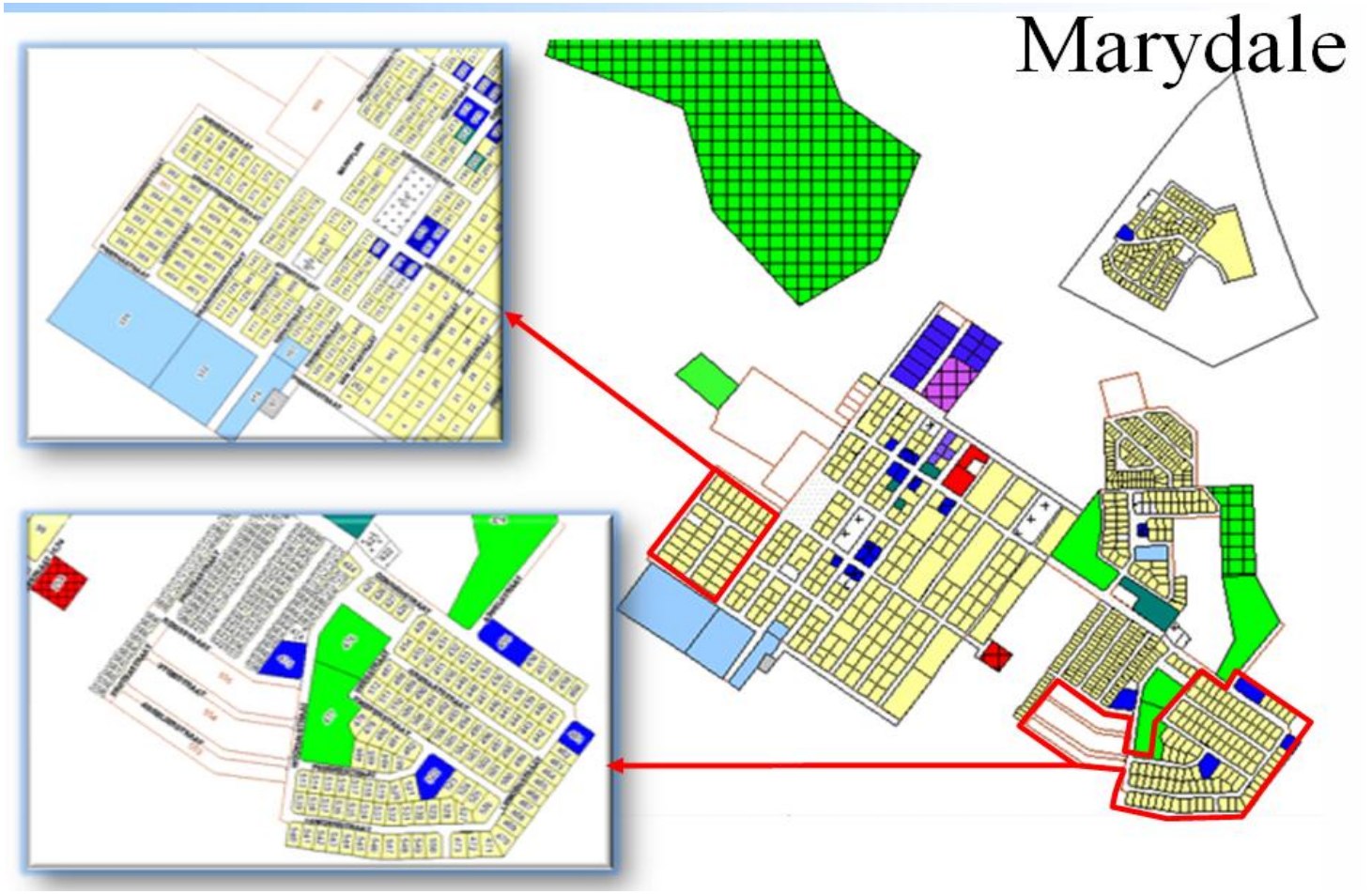
Total Need escalates with 11.82% from **3132** to **3502;** 2009/10 to 2010/2011.

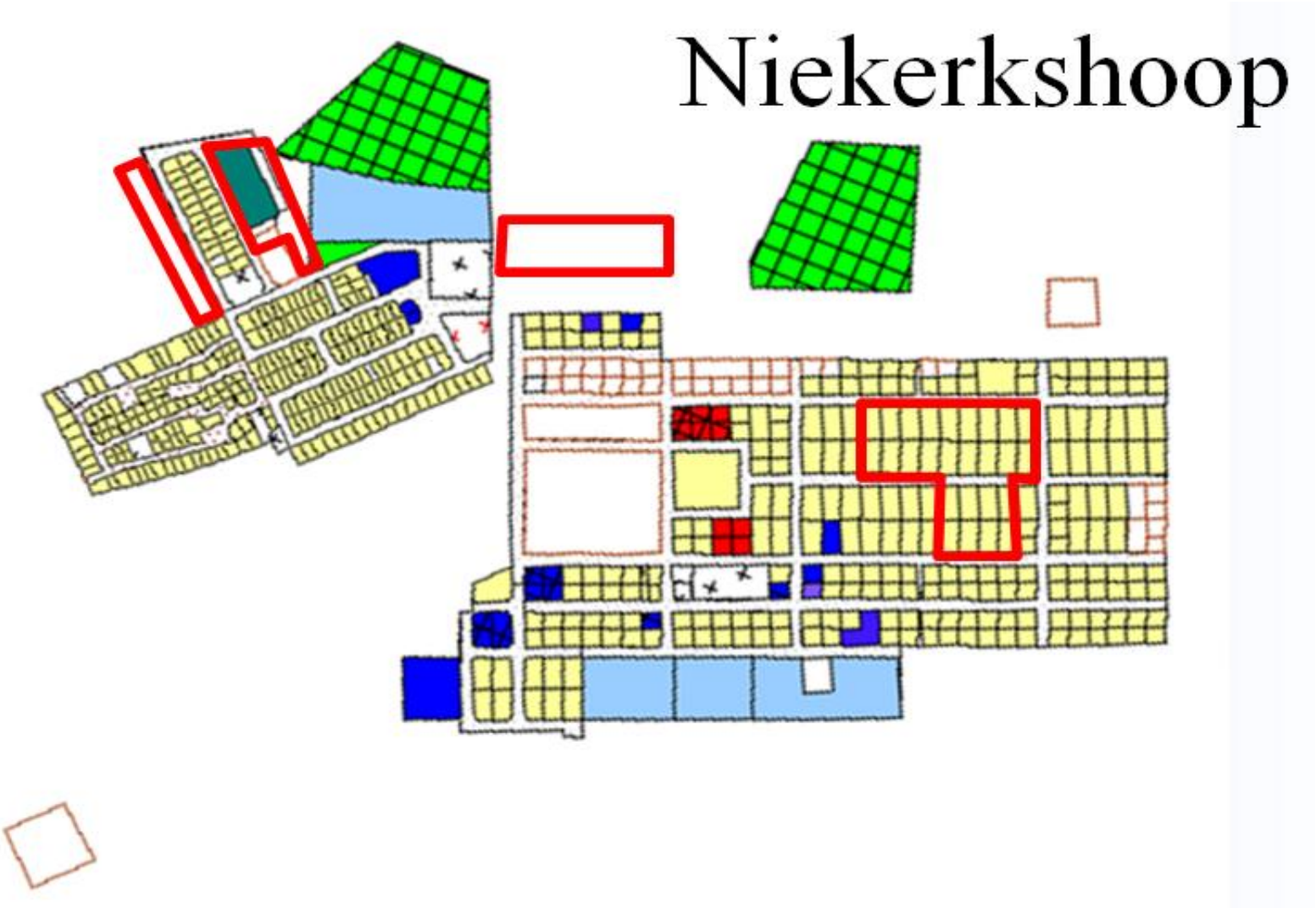
			The need for Bulk Services
Bulk Services	Prieska	Water	Oranje / Pomp stasie vanaf rivier tot Pomp - Stasie
			Opgaardam na nuwe uitbreiding
		Sanitation	Vir nuwe gebiede
		Electricity	Vir nuwe gebiede
	Marydale	Water	Vir nuwe gebiede
		Sanitation	Vir nuwe gebiede
		Electricity	Vir nuwe gebiede
	Niekerkshoop	Water	Vir nuwe gebiede
		Sanitation	Vir nuwe gebiede
		Electricity	Vir nuwe gebiede

Township Establishment	The areas is already part of the Township areas.
Envirom. Impact Assesment	EIA's only exist for the serveyed sites.
Geotechnical Analysis	Geotechnical reports also exist for the serveyed sites.
Availability of Land	Land is available.



Addendum J Housing Data Collection & Project Rediness.xls


Marydale


Niekerkshoop

Chapter 10

Comprehensive Infrastructure Plan Data Collection Template

Basis for formulating business plans for providing sustainable infrastructure services

Version	8
Revision	d
Municipality	Siyathemba LM
Code	NC077
Data saved	2010/01/20

Notes

1 This draft version of the template serves to clarify the approach to be followed in assessing the infrastructure investment needs for this municipality. The following applies:

a The sheets for demography and housing have been compelted
b The sheets for water have been completed
c The sheets for
d Summative roads requirements will be included as it is included in the MTEF
e Summative institutional capacity details will be collected per municipality - details will be submitted at the workshop
f Summary budget data have been proposed - this will be summarised once discussed with NT
g A list of MIG projects will be compiled on the basis of the project lists per discipline

1.4 Record of Updates

Revision	Person	Date	Page	Scope
0	Ras, C	2008/07/25	Full file	Original populated with StatsSA data
1	Jakob Basson	2008/08/14	Full file	Compilation of Document
1	Johann Badenhorst	2008/08/14	Full file	Compilation of Document
1	Johann Badenhorst	2010/01/20	Full file	Review and update document
2				
2				
2				
2				
2				
3				
3				
3				
3				
3				
3				
4				
4				
4				
4				
4				
4				

1.1 Contact Persons

Number	Surname	Initials	Title	Organisation	Position	Telephone	Cellphone	Fax	email
1	Bessies	G.J.	Mr.	Siyathemba Municipality	Municipal Manager	053 3535300	083 6770070	053 3531386	psk.muni@prieska.co.za
2	Badenhorst	J.J	Mr.	Siyathemba Municipality	Manager Technical Services	053 3535300	082 8042374	053 3531386	johannb@siyathemba.gov.za
3	Niewenhuizen	H.	Mr.	Siyathemba Municipality	Chief Financial Officer	053 3535300		053 3531386	hniewenhuizen@siyathemba.gov.za
4	Vacant			Siyathemba Municipality	Manager Corporate Services	053 3535300		053 3531386	psk.muni@prieska.co.za
5	Basson	J.	Mr.	Siyathemba Municipality	Assistance Tech. Manager	0533535300	082 4012767	0533531386	jakob@siyathemba.gov.za
6	Nell	E.	Me.	Siyathemba Municipality	Mayor	053 3535300	079 9988575	053 3531386	psk.muni@prieska.co.za
7									
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30									

1.2 Reference Documents

Number	Title	Author(s)	Organisation	Date	Status	Reference Number	Comments
1	Financial statements for 2009/10	CHIEF FINANCIAL OFFICER	SIYATHEMBA MUNICIPALITY	August 2009	Approved		
2	Budgets	CHIEF FINANCIAL OFFICER	SIYATHEMBA MUNICIPALITY	May-09	Approved		
3	Integrated Development Plan	LED COORDINATOR	SIYATHEMBA MUNICIPALITY	May-09	Approved		
4	Local Economic Development plan	LED COORDINATOR	SIYATHEMBA MUNICIPALITY	May-09	Approved		
5	Water Services Development Plan (WSDP)	Consultants busy	SIYATHEMBA MUNICIPALITY	In Process	Approved		
6	Assessment of the roads and transportation infrastructure	NOT YET DONE					
7	Assessment of the electrical infrastructure	BVI CONSULTING ENGINEERS	BVI	1996	Approved		
8	Staff structure	COUNCIL /OFFICIALS	SIYATHEMBA MUNICIPALITY	2001	Approved		
9	Performance agreements for Section 57 employees	Busy					
10	Municipal Demarcation Board Assessment	DEMARCATION BOARD	SIYATHEMBA MUNICIPALITY	In Process			
11	Spatial Development Framework	NOT YET DONE					
12							
13							
14							
15							
16							
17							

1.3 External Support

Number	Nature of Support	Yes/No	Key Contact/Person	Organisation	Date	Status	Contact Details	Comments
1	Project Consolidate	No						
2	Staff provided by DBSA	Yes	Hendrik du Plessis Pr Eng	Siyenza Manje	2008/03/01	Ongoing	832359865	Good Working relationship
3	Staff provided by SAICE	No						
4	Staff provided by SAACE	No						
5	Donor-sponsored staff	No						
6	Staff seconded by SOE	No						
7	Staff provided by other municipalities	No						
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								

1.4 Capital Budget Summary for Projects

Intervention	Total Amount	01-Mar-09	01-Mar-10	01-Mar-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-16
Housing	**R 111 455 481**	**R -**	**R -**	**R 22 350 000**	**R 51 420 000**	**R 31 770 000**	**R 5 830 000**	**R -**	**R -**
Water Backlogs	R 10 430 000	R -	R -	R 2 080 000	R 4 800 000	R 2 990 000	R 560 000	R -	R -
Water Refurbishment	R 18 550 000	R -	R -	R 5 320 000	R 10 540 000	R 2 690 000	R -	R -	R -
Water Bulk	R -	R -	R -	R -	R -	R -	R -	R -	R -
Water Treatment Works	R -	R -	R -	R -	R -	R -	R -	R -	R -
	R 28 980 000	**R -**	**R -**	**R 7 400 000**	**R 15 340 000**	**R 5 680 000**	**R 560 000**	**R -**	**R -**
Sanitation Backlogs	R 19 760 000	R -	R -	R 6 170 000	R 13 590 000	R -	R -	R -	R -
Sanitation Refurbishment	R -	R -	R -	R -	R -	R -	R -	R -	R -
Sanitation Bulk	R -	R -	R -	R -	R -	R -	R -	R -	R -
Sanitation Treatment Works	R -	R -	R -	R -	R -	R -	R -	R -	R -
	R 19 760 000	**R -**	**R -**	**R 6 170 000**	**R 13 590 000**	**R -**	**R -**	**R -**	**R -**
Roads: new	R 27 780 000	R -	R 4 730 000	R 8 860 000	R 9 070 000	R 5 120 000	R -	R -	R -
Roads: upgrading	R -	R -	R -	R -	R -	R -	R -	R -	R -
Taxi facilities	R -	R -	R -	R -	R -	R -	R -	R -	R -
Roads: maintenance	R -	R -	R -	R -	R -	R -	R -	R -	R -
	R 27 780 000	**R -**	**R 4 730 000**	**R 8 860 000**	**R 9 070 000**	**R 5 120 000**	**R -**	**R -**	**R -**
Electricity Backlogs	R -	R -	R -	R -	R -	R -	R -	R -	R -
Electricity Refurbishment	R -	R -	R -	R -	R -	R -	R -	R -	R -
Electricity Distribution	R -	R -	R -	R -	R -	R -	R -	R -	R -
Electricity Substations	R -	R -	R -	R -	R -	R -	R -	R -	R -
	R -	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**
	R 187 975 481	**R -**	**R 4 730 000**	**R 44 780 000**	**R 89 420 000**	**R 42 570 000**	**R 6 390 000**	**R -**	**R -**

Questions:

This data will be summarised per funding source

The most recent municipal budgets and actual income statements should be included.

nr	Province	Project Type	District	DM Code	Municipality
8301	Northern C	Roads and related stormwater	Pixley ka Seme DM	DC7	Siyathemba LM
4283	Northern C	Sanitation	Pixley ka Seme DM	DC7	Siyathemba LM
	Northern C	Electrical	Pixley ka Seme DM	DC7	Siyathemba LM
	Northern C	Sport	Pixley ka Seme DM	DC7	Siyathemba LM
	Northern C	Solid Waste	Pixley ka Seme DM	DC7	Siyathemba LM
	Northern C	Sanitation	Pixley ka Seme DM	DC7	Siyathemba LM
	Northern C	Solid Waste	Pixley ka Seme DM	DC7	Siyathemba LM
	Northern C	Water supply	Pixley ka Seme DM	DC7	Siyathemba LM
	Northern C	Sanitation	Pixley ka Seme DM	DC7	Siyathemba LM

LM Code	Project Name	MIS Ref	National Reference	Provincial Reference	Municipal Ref
NC077	Upgrading of Gravel access roads Prieska (276)	2541	R/NC/0508/06/08	276	
NC077	Prieska: Sewerage Works(446) Add. funding	149824	S/NC/2497/04/07	446	
NC077	442:Prieska/Marydale/ Niekerkshoop High Mast lighting		MIG/NC0190/CL/07/08		
NC077	389:Marydale Upgrading of Sport Facilities		MIG/NC0198/CF/08/09		
NC077	924:Marydale Upgrading of Solid waste		MIG/NC0276/SW/09/10		
NC077	922:Upgrading of VIP toilets to full waterborne system &installation of sewer reticulation system		MIG/NC0283/S/09/11		
NC077	923:Prieska Upgrading of Solid Waste		MIG/NC0281/SW/09/10		
NC077	926:Marydale Upgrading of water supply infrastructure		MIG/NC0289/W/09/11		
NC077	922:Prieska Upgrading of VIP Toilets and Installation of sewer system	178913	MIG/NC0283/S/09/11	922	

Information from the MIG MIS						
Comp	**Project Status**	**Start Date**	**End Date**	**New / Rehab**	**Urban / Rural**	**Funding Registered (Total)**
B	Pre-Implementation	2006/06/01	2008/05/31	New	Rural	R 4 948 651.00
B	Pre-Implementation	2004/03/12	2008/02/28	Rehab	Rural	R 9 912 300.00
B	Implementation	2010/01/11	2010/03/31	New	Rural	2 058 030.00
B	Pre-Implementation					3 986 373.00
B	Pre-Implementation					1 824 000.00
B	Pre-Implementation					25 251 000.00
B	Pre-Implementation					2 166 000.00
B	Pre-Implementation					2 679 000.00
B	Pre-Implementation					5 808 300.00

Funding Registered (MIG)	Funding Registered (Public)	Funding Registered (Private)	Expenditure	Variance (Tot Reg - Tot Cashflow)
R 4 948 651.00	R 0.00	R 2 000 000.00	R 0.00	R 4 948 651.00
R 8 820 300.00	R 1 092 000.00	R 0.00	R 0.00	R 9 912 300.00
2 058 030.00	0.00	R 0.00	R 0.00	R 2 058 030.00
3 986 373.00	0.00	R 0.00	R 0.00	3 986 373.00
1 824 000.00	0.00	R 0.00	R 0.00	1 824 000.00
22 150 000.00	3 101 000.00	R 0.00	R 0.00	22 150 000.00
2 166 000.00	0.00	R 0.00	R 0.00	2 166 000.00
2 679 000.00	0.00	R 0.00	R 0.00	2 679 000.00
5 808 300.00	R 0.00	R 0.00	R 0.00	5 808 300.00

Province	DM CODE	District Municipality	LM CODE	Name	Implementing Agent	National Project Number	Project Name	Date Registered	MIG Component (B, P or E)	Project Category (eg water, sanitation, PMU etc)	Bulk Project (Yes/No)
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC00	276:Priesk	2006/06/05	B-Compon	Roads	
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC00	446:Priesk	2006/05/16	B-Compon	Sanitation	
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC0190	442:Priesk	2006/05/16	B-Compon	Electrical	Yes
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC0198	389:Marydale Upgrading of Sport Facilities	2006/05/16	B-Compon	Sport	no
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC0276	924:Marydale Upgrading of Solid waste	2006/05/16	B-Compon	Solid Waste	Yes
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC0283	922:Upgrading of VIP toilets to full waterborne system &installation of sewer reticulation system	2006/05/16	B-Compon	Sanitation	no
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC0281	923:Priesska Upgrading of Solid Waste	2006/05/16	B-Compon	Solid Waste	Yes
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC0289	926:Marydale Upgrading of water supply infrastructure	2006/05/16	B-Compon	Water	yes
Northern C	DC7	Pixley Ka S	NC077	Siyathemba	Siyathemb	MIG/NC0283	922:Priesska Upgrading of VIP Toilets and Installation of sewer system	2006/05/16	B-Compon	Sanitation	no

Internal Reticulation (Yes/No)	Connector (Yes/No)	Rural / Urban	New / Rehabilitate	Nodal Project (Yes/No)	Anchor Project (Yes/No)	ISRDP / URP	Nodal Area (eg Alexandra)	Labour Intensive Project (Yes/No)	EPWP Project (Yes/No)	SMIF Project (Yes/No)	Bucket Eradication (Yes/No)	Number of buckets to be eradicated	Total Project Cost	MIG Funds	Public Sector Funds	Private Sector Funds
		Rural	New	No	No			Yes	Yes	No	No		R 4 948 651.00	R 3 472 500.00	R 1 476 151.00	
		Rural	Rehabilitat	No	No			Yes	No	No	Yes		R 9 912 300.00	R 8 820 300.00	R 1 092 000.00	
no	no	Rural	Rehabilitat	No	No			Yes	No	No	No		2 058 030.00	2 058 030.00	0.00	R 0.00
no	no	Rural	Rehabilitat	No	No			Yes	No	No	No		3 986 373.00	3 986 373.00	0.00	R 0.00
no	no	Rural	Rehabilitat	No	No			Yes	No	No	No		1 824 000.00	1 824 000.00	0.00	R 0.00
yes	no	Rural	new	No	No			Yes	No	No	No		25 251 000.00	22 150 000.00	3 101 000.00	R 0.00
no	no	Rural	Rehabilitat	No	No			Yes	No	No	No		2 166 000.00	2 166 000.00	0.00	R 0.00
no	no	Rural	new	No	No			Yes	No	No	No		2 679 000.00	2 679 000.00	0.00	R 0.00
yes	no	Rural	new	No	No			Yes	No	No	No		5 808 300.00	5 808 300.00	R 0.00	R 0.00

Planned date: Consultant to be appointed (start with design)	Actual date: Consultant was appointed (start with design)	Planned date: Tender to be advertised	Actual date: Tender was advertised	Planned date: Contractor to be appointed and construction to start	Actual date: Contractor was appointed and construction to start	Planned date: Project to be completed	Actual date: Project are completed (Physical Completion Certificate	Project Status (Registered, Design & Tender, Construction, Completed)	Total Actual Expenditure as End of March 2004 (Previous CMIP & DWAF)	Total Actual Expenditure in the 2004-2005 financial year on MIG funds	Total Actual Expenditure in the 2005-2006 financial year on MIG funds	Total Actual Expenditure in the 2006-2007 financial year on MIG funds	Total Actual Expenditure in the 2007-2008 financial year on MIG funds	Total Actual Expenditure in the 2008-2009 financial year on MIG funds	Exp Tot	Exp %	Project Value (Est)
								Construction	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00			
								Completed	R 0.00	R 0.00	R 0.00	R 3 303 222.00	R 3 972 988.57	R 607 486.00			
								Implementation									
								Pre-Implementation									
								Pre-Implementation									
								Pre-Implementation									
								Pre-Implementation									
								Pre-Implementation									
								Pre-Implementation									

Water

Municipality	Piped water inside the dwelling	Piped water inside the yard	Piped (tap) water to community stand: distance less than 200m from dwelling	Piped (tap) water to community stand: distance greater than 200m from dwelling	No access to piped (tap) water	Not applicable	Borehole
NC077	945	2 876	187	114	60	-	
	3	4	5	6	7	8	

Energy

Municipality	Electricity	Gas	Paraffin	Candles	Wood	Coal	Animal dung
NC077	3 562	6	37	536			
	10	11	12	13			

Housing

Municipality	Formal	Informal	Traditional	Backyard	Other	Institution	
NC077	3 615	326	110	36	13	81	
	18	19	20	21	22	23	

Sanitation

Municipality	Flush toilet (connected to sewerage system)	Flush toilet (with septic tank)	Chemical toilet	Pit latrine with ventilation (VIP)	Pit latrine without ventilation	Bucket latrine	None
NC077	2 937	111	5	36	52	777	265
	25	26	27	28	29	30	31

sehold Survey 2007

Spring	Dam/pool	River/stream	Water vendor	Rain water tank	Other	>=RDP	<RDP	>+RDP%	<RDP%	Total
						4 121	60	99%	1%	**4 182**

Solar	Other	Not applicable (institutions)				>=RDP	<RDP	>+RDP%	<RDP%	Total
34	7	-				3 568	614	85%	15%	**4 182**

14 15 16

						>=RDP	<RDP	>+RDP%	<RDP%	Total
						3 842	340	92%	8%	**4 182**

Not applicable (institutions)						>=RDP	<RDP	>+RDP%	<RDP%	Total
-						3 083	1 099	74%	26%	**4 182**

32

2.1: Wards in Municipality

Ward Allocations					Summary of Service Delivery in Municipality													
					Total Households		Housing Backlogs				Water Backlogs				Sanitation Backlogs			
Sort	Ward	WardNo	Category	Urban/Rural	2001	2008	2001	2008	Planned	Remain	2001	2008	Planned	Remain	2001	2008	Planned	Remain
1		30707001	Urban – Formal	Urban	992	1 202	200	12	12	-	57	25	25	-	131	12	12	-
2		30707002	Urban – Formal	Urban	862	2 569	47	1 541	1 541	-	10	1 543	1 543	-	3	1 848	1 848	-
3		30707003	Urban – Formal	Urban	1 185	2 043	210	613	613	-	44	623	623	-	482	805	805	-
4		30707004	Urban – Formal	Urban	1 143	1 385	110	402	402	-	63	416	416	-	477	402	402	-
					4 182	**7 200**	**567**	**2 568**	**2 568**	**-**	**174**	**2 607**	**2 607**	**-**	**3 094**	**5 075**	**3 067**	**-**
	2	1	3	4	2007HHS:	**4 182**	2007HHS:	**340**			2007HHS:	**60**			2007HHS:	**1 099**		
					Growth rate:	0.0%	Remaining backlogs:		-		Remaining backlogs:		-		Remaining backlogs:		2 008	

	>RDP '01	>RDP '08	Planned
Housing	86%	64%	100%
Water	96%	64%	100%
Sanitation	26%	30%	72%
Electricity	65%	75%	75%
Roads	80%	80%	80%
Institutional	60%	60%	60%

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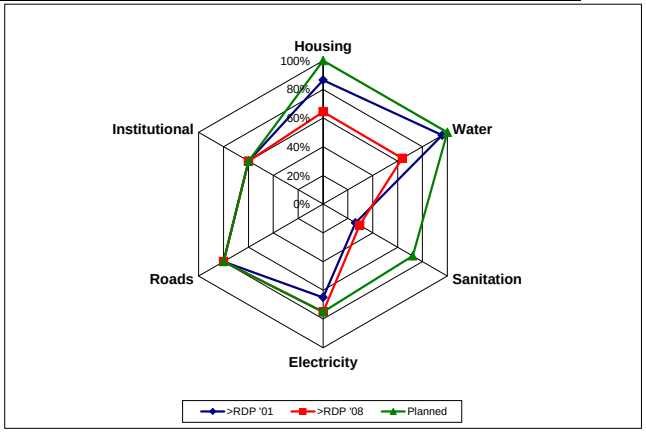
Titles

Category	Urban/Rural
Commercial Farms	Urban
Rural Village > 5000	Rural
Rural Village < 5000	
Rural Scattered	
Metropolitan	
Urban – Formal	
Urban – Former Township	
Urban – Informal	



2.1 Wards

2.1.1 Objectives

1. Familiarise yourself with the wards

2.1.2 Methodology

(see the **blue numbers** above)

1. Identify the wards on a map
2. Confirm the names of the areas
3. Assign the appropriate land use category to the ward (use the cetagory applicable to the largest population
4. Distinguish between urban and rural areas

Ward Allocations					Combined Status of Services						
Sort	Ward	WardNo	Category	Urban/Rural	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15
1		30707001	Urban – Formal	Urban	99%	99%	99%	99%	100%	100%	100%
2		30707002	Urban – Formal	Urban	-24%	-24%	-24%	-24%	100%	100%	100%
3		30707003	Urban – Formal	Urban	54%	54%	54%	54%	100%	100%	100%
4		30707004	Urban – Formal	Urban	65%	65%	65%	65%	71%	100%	100%
					36%	**36%**	**36%**	**36%**	**94%**	**100%**	**100%**
	2	1	3	4							

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Titles

Colour Ranges	
Limit 1	50%
Limit 2	90%

Relative Weights	
Housing	40%
Water	20%
Sanitation	40%
	100%

Category	Urban/Rural
Commercial Farms	Urban
Rural Village > 5000	Rural
Rural Village < 5000	
Rural Scattered	
Metropolitan	
Urban – Formal	
Urban – Former Township	
Urban – Informal	

2.1 Wards

2.1.1 Objectives

1. Familiarise yourself with the wards

2.1.2 Methodology

(see the **blue numbers** above)

1. Identify the wards on a map
2. Confirm the names of the areas
3. Assign the appropriate land use category to the ward (use the cetagory applicable to the largest population
4. Distinguish between urban and rural areas

2.2: Anticipated New Developments

CatNo	Category	Number	Type	Ward	Value	Date	Funding
A	Commercial development	1	Shops (<1000 m2)	3E+07	R 2 000 000	01-Jun-11	01-Jun-11
		2					
		3					
		4					
		5					
		6					
B	Industrial development	1	Other	3E+07	R 3 000 000	01-Jun-12	01-Jun-12
		2					
		3					
		4					
		5					
		6					
		7					
C	Institutional development	1					
		2					
		3					
		4					
		5					
D	Tourism	1	Eco-tourism	3E+07	R 30 000 000	01-Jun-12	01-Jun-12
		2					
		3					
		4					
		5					
		6					
		7					
E	Transport nodes	1					
		2					
		3					
		4					
		5					
		6					
		7					

Commercial development
Shops (<1000 m2)
Local shopping centres (>1000m2, <2000m2)
Regional shopping centre (>2000m2, <10 000m2)
Mega centres (>10 000m2)
Other

Industrial development
Single factory
Industrial park
Large anchor factor with smaller suppiers
Signficant factor/refinery, etc
Other

Institutional development
Training college
University
Hospital
Other

Tourism
Hotel
Game reserve
Sporting complex
Toursim route
Eco-tourism
Other

Transport nodes
Taxi rank
Train station
Bus station
Airport
Inter modal transport node
Other

1 2 3 4

Private
Municipality
Neighbourhood
Fund
Joint financing

2.2 Anticipated New Developments

2.2.1 Objectives

1. Identify planned new investments in the municipality
2. identify potential job opportunities in the municipality

2.2.2 Methodology

(see the **blue numbers** above)

Review the current IDP, LED plan, the Spatial Development Framework, and current nodal development plans for the municipality, the province and the country. Use this as input into this summary table

1. Identify the significant investments that will most probably be made in the next 5 years in the municipality. Do this according to the different categories listed above (A-E) by selecting the type of development

2. For each development, identify the primary Ward where this development will be located
3. Provide an estimate of the capital value of this development (if available, else leave blank)
4. Indicate the date when this development will be completed (ie as from when it will provide jobs to the people of the community)

2.3: Planned Housing Developments (left)

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Urban/Rural
1	NC077	Siyathemba Local Municipality	1	30707001	Urban – Formal	Urban
2	NC077	Siyathemba Local Municipality	2	30707002	Urban – Formal	Urban
3	NC077	Siyathemba Local Municipality	3	30707003	Urban – Formal	Urban
4	NC077	Siyathemba Local Municipality	4	30707004	Urban – Formal	Urban
			Totals			

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2 Demography & Housing

2.1 Objective

1. Confirm the current number of households
2. Confirm housing needs
3. Identify projects required to address housing needs

2.2 Methodology

1. Assess and confirm the current demographic composition of each ward using the information provided from Census 2001
2. Compare these with the latest estimates based upon the 2007 Household Survey and update these if significant growth or migration has occured in a particular ward
3. Confirm the housing needs (i.e. confirm the percentage of houses not meeting basic minimum standards)
4. Compile a list of projects to eradicate the housing backlogs
5. For each ward, allocate the housing backlogs to a housing project
6. Indicate the number of houses to be built in the particular project in each ward
7. Estimated costs of these projects per ward using either a standard price, or modify it as required
8. Indicate the current ownership status of the land to be used for the housing project(s)
9. Indicate the current zoning of the land to be used for the housing project(s)
10. Indicate the current status of the EIA for the land to be used for the housing project(s)
11. Add reference to clarifying notes per ward
12. Indicate the type of subsidy or funding to be used for the project(s) - refer to the next sheet for details of the different housing schemes
13. Indicate the funding source for the housing project(s)
14. Provide the estimated completion dates for these projects
15. Add any fixed costs per project (allow for rezoing, EIA, land purchases and othe rfixed costs)
16. Add reference to clarifying notes per project

2.3: Planned Housing Developments (left)

					StatsSA 2001				Estimate 2008		Growth		
Sort	Municipal Code	Municipal Name	Ward	WardNo	Total	Formal	% RDP	2001	% Formal '08	2008	7 yrs	Annual	Need
1	NC077	Siyathemba Local Municipality	1	30707001	992	792	99%	992	99%	1 202	21%	3.3%	12
2	NC077	Siyathemba Local Municipality	2	30707002	862	815	40%	862	40%	2 569	198%	20.0%	1 541
3	NC077	Siyathemba Local Municipality	3	30707003	1185	975	70%	1 185	70%	2 043	72%	9.5%	613
4	NC077	Siyathemba Local Municipality	4	30707004	1143	1033	71%	1 544	71%	1 385	-10%	-1.8%	402
			Totals		**4 182**	**3 615**	**86%**	**4 583**	**86%**	**7 200**	**57%**	**9.5%**	**2 568**
						567				100%			**35 467**

1 2 3

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16. Add reference to clarifying notes per project

4 12 13

ProjectNo	Donor Code	Name	Status	Type Subsidy	Funding Source
1		Ethembeni 12	Unregistered	ProjecSubs	Dept of Housing
2		Prieska 1541	Unregistered	ProjecSubs	Dept of Housing
3		Marydale 613	Unregistered	ProjecSubs	Dept of Housing
4		Niekerkshoop 402	Unregistered	ProjecSubs	Dept of Housing
Total					

Status	Type Subsidy	Funding
Unregistered	IndivSubs	Municipal
Registered	InfUpgrade	Donor
Design & Tender	BlockCurr	Dept of Housing
Construction	EmerSubs	Private
Complete	FLISP	Other
	ProjecSubs	
	InstSubs	
	ConsolSubs	
	RuralSubs	
	PeoplesSubs	
	ExtDiscount	
	SocHousing	
	CommResUnits	
	IndivSubs	
	ExtDiscount	

2.3: Planned Housing Developments (left)

					Housing Projects				Land availability			
Sort	Municipal Code	Municipal Name	Ward	WardNo	Project	Number Houses	Value	Unserved	Ownership	Zoning	EIA	Date
1	NC077	Siyathemba Local Municipality	1	30707001	1	12	521 843	-	Municipal	Minor rezoing	Not started	30-Jun-12
2	NC077	Siyathemba Local Municipality	2	30707002	2	1 541	66 896 760	-	Municipal	Minor rezoing	Not started	30-Jun-12
3	NC077	Siyathemba Local Municipality	3	30707003	3	613	26 599 860	-	Municipal	Minor rezoing	Not started	30-Jun-12
4	NC077	Siyathemba Local Municipality	4	30707004	4	402	17 437 018	-	Municipal	Minor rezoing	Not started	30-Jun-13
		Totals				2 568	111 455 481					
						Unit price	43 400					
						Remaining backlog		-				
							18 000					

5 6 7 8 9 10

Ownership	Zoning	EIA
Municipal	Resolved	Not started
National	Minor rezoing	In progress
Provincial	Potential bottleneck	Serious delays
Private	Unknown	Finalising
Unknown		Done

14 15 16

ComplDate	Number Houses	Value	Fixed Costs	Total	Comments/Notes
30-Jun-12	12	R 521 843	R -	R 521 843	Municipality unable to contribute financially
30-Jun-12	1 541	R 66 896 760	R -	R 66 896 760	Municipality unable to contribute financially
30-Jun-12	613	R 26 599 860	R -	R 26 599 860	Municipality unable to contribute financially
30-Jun-13	402	R 17 437 018	R -	R 17 437 018	Municipality unable to contribute financially
	-	R -	R -	R -	
	-	R -	R -	R -	
	-	R -	R -	R -	
	-	R -	R -	R -	
	2 568	R 111 455 481	R -	R 111 455 481	
		R 43 400			

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2 Demography & Housing

2.1 Objective

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16. Add reference to clarifying notes per project

2.3: Planned Housing Developments (left)

Sort	Municipal Code	Municipal Name	Ward	WardNo	Comments/Notes
1	NC077	Siyathemba Local Municipality	1	30707001	Future projects
2	NC077	Siyathemba Local Municipality	2	30707002	Future projects
3	NC077	Siyathemba Local Municipality	3	30707003	Future projects
4	NC077	Siyathemba Local Municipality	4	30707004	Future projects
			Totals		

2.3: Planned Housing Developments (right)

Status of Housing						
28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15
99%	99%	99%	99%	100%	100%	100%
40%	40%	40%	40%	100%	100%	100%
70%	70%	70%	70%	100%	100%	100%
71%	71%	71%	71%	71%	100%	100%
64%	**64%**	**64%**	**64%**	**94%**	**100%**	**100%**

2 Demography & Housing

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2.2 Methodology

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16. Add reference to clarifying notes per project

Duration	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	Test
24	-	-	170 000	260 000	90 000	-	-	
24	-	-	22 180 000	33 450 000	11 180 000	-	-	
12	-	-	-	17 710 000	8 890 000	-	-	
12	-	-	-	-	11 610 000	5 830 000	-	
	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	
	-	**-**	**22 350 000**	**51 420 000**	**31 770 000**	**5 830 000**	**-**	

2.4 Current Housing Subsidy Amounts

Current Subsidies Programmes of the Department of Housing					
Number	**Type Subsidy**	**Abbreviation**	**Amount**	**Services**	**Notes**
1	Individual subsidies	IndivSubs	R 43 506	R 17 874	Services to be provided only by exception
2	Informal Settlement Upgrading Programme	InfUpgrade	R 26 657	R 22 698	Services included
3	Blocked projects and current commitments	BlockCurr	R 43 374	R 17 847	Services included
4	Emergency Housing Assistance Programme	EmerSubs	R 26 657	R 22 698	Services included
5	The Finance-linked Individual Subsidy Programme (FLISP)	FLISP	R 28 090		
6	Project linked subsidies	ProjecSubs	R 43 506		
7	Institutional subsidies	InstSubs	R 43 506		
8	Consolidation Subsidies	ConsolSubs	R 43 506		
9	Rural subsidies	RuralSubs	R 43 506		
10	People’s Housing Process	PeoplesSubs	R 43 506		
11	Extended discount benefit scheme	ExtDiscount			
12	Social housing	SocHousing			
13	Community residential units	CommResUnits			

Housing subsidy information provided by Department of Housing in May 2008 (refer to their circulars for specific details)

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Urban/Rural	Households 2001	Households 2008
1	NC077	Siyathemba Local Municipality		30707001	Urban – Formal	Urban	992	1 202
2	NC077	Siyathemba Local Municipality		30707002	Urban – Formal	Urban	862	1 045
3	NC077	Siyathemba Local Municipality		30707003	Urban – Formal	Urban	1 185	1 436
4	NC077	Siyathemba Local Municipality		30707004	Urban – Formal	Urban	1 143	1 385
							4 182	**5 069**

3. Water

3.1 Objectives

• Confirm the current water backlogs
• Confirm interim and ultimate service levels
• Confirm current condition of infrastructure (for the higher capacity municipalities)
• Identify projects required to address housing needs

3.2 Methodology

3.2.1 End-consumer (reticulation/household level)

1. Confirm current backlogs at ward level
2. Confirm the maximum target levels of service per ward
3. Identify a list of projects that would be needed to eradicate the backlogs
4. Allocate the backlog eradication per ward to specific projects and indicate the number of households to address per ward
5. Estimate the total value of work required to eradicate the backlogs per ward
6. Obtain estimates of the current condition of the networks (refer to age, leakage rates, etc)
7. Identify a list of projects that would be needed to refurbish the existing networks
8. Complete the basic details of each new project, indicating its:
   8a Name
   8b Status
   8c Type and source of funding
   8d Target completion date
   8e Consolidate the information at project level and indicate any additional costs
   8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   9a Name
   9b Status
   9c Type and source of funding
   9d Target completion date
   9e Consolidate the information at project level and indicate any additional costs
   9f Include a reference to any relevant clarifying notes or comments

3.2.2 Assess the bulk supply to all wards

11. Identify the list of bulk supply schemes
12. Allocate the wards to individual supply schemes
13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

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3.1 Water Supply (left pages)

						2001			Current Backlog (2008)		
Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	>=RDP	<RDP	<RDP%	<RDP%	<RDP	Upd<RDP%
1	NC077	Siyathemba Local Municipality		30707001	Urban – Formal	935	57	0.057459677	6%	25	2%
2	NC077	Siyathemba Local Municipality		30707002	Urban – Formal	852	10	0.011600928	1%	1 543	148%
3	NC077	Siyathemba Local Municipality		30707003	Urban – Formal	1141	44	0.037130802	4%	623	43%
4	NC077	Siyathemba Local Municipality		30707004	Urban – Formal	1080	63	0.05511811	6%	416	30%
						4 008	**174**	**4%**	**51%**	**2 607**	**51%**

1

3. Water

3.1 Objectives

- Confirm the current water backlogs
- Confirm interim and ultimate service levels
- Confirm current condition of infrastructure (for the higher capacity municipalities)
- Identify projects required to address housing needs

3.2 Methodology

3.2.1 End-consumer (reticulation/household level)

1. Confirm current backlogs at ward level
2. Confirm the maximum target levels of service per ward
3. Identify a list of projects that would be needed to eradicate the backlogs
4. Allocate the backlog eradication per ward to specific projects and indicate the number of households to address per ward
5. Estimate the total value of work required to eradicate the backlogs per ward
6. Obtain estimates of the current condition of the networks (refer to age, leakage rates, etc)
7. Identify a list of projects that would be needed to refurbish the existing networks
8. Complete the basic details of each new project, indicating its:
   - 8a Name
   - 8b Status
   - 8c Type and source of funding
   - 8d Target completion date
   - 8e Consolidate the information at project level and indicate any additional costs
   - 8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   - 9a Name
   - 9b Status
   - 9c Type and source of funding
   - 9d Target completion date
   - 9e Consolidate the information at project level and indicate any additional costs
   - 9f Include a reference to any relevant clarifying notes or comments

3.2.2 Assess the bulk supply to all wards

11. Identify the list of bulk supply schemes
12. Allocate the wards to individual supply schemes
13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

11

Bulk Supply Schemes

Scheme	Name	Need	Ratio	Capacity	Source
		13			
		€			

Type
Dam
Groundwater
River
Other

3 8a 8b

Summary of Water Supply Projects - Reticulation

ProjectNo	Donor Code	Name	Status	Type Subsidy	Funding Source
1		Ethembeni 12	Unregistered	Grant	MIG
2		Prieska 1541	Unregistered	Grant	MIG
3		Marydale 613	Unregistered	Grant	MIG
4		Niekerkshoop 402	Unregistered	Grant	MIG
Total					

Status	Type Subsidy	Funding
Unregistered	Grant	Municipal
Registered	Loan	MIG
Design & Construction	Internal funds	Dept of Housing
Complete	Developer	Private
	Other	DBSA
		Other

Legend
Input required by user
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Reference to a lookup table
Fixed - information only

7a 9a 9b 9

Summary of Water Refurbishment Projects - Reticulation and others

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Target Level of Service TargetLoS		Rate	New Projects Project	Number		Value	Date	Description	Status
1	NC077	Siyathemba Local Municipality		30707001	Urban – Formal	Yard	R	4 000	1	25	R	100 000	30-Jun-12		
2	NC077	Siyathemba Local Municipality		30707002	Urban – Formal	Yard	R	4 000	2	1 543	R	6 172 000	30-Jun-12	Prieska 2	1: Poor - significant losses
3	NC077	Siyathemba Local Municipality		30707003	Urban – Formal	Yard	R	4 000	3	623	R	2 492 000	30-Jun-12	Prieska and Mary	1: Poor - significant losses
4	NC077	Siyathemba Local Municipality		30707004	Urban – Formal	Yard	R	4 000	4	416	R	1 664 000	30-Jun-13	Prieska and Niek	1: Poor - significant losses
										2 607		**10 428 000**			

2 4 5 6

3. Water

3.1 Objectives

- Confirm the current water backlogs
- Confirm interim and ultimate service levels
- Confirm current condition of infrastructure (for the higher capacity municipalities)
- Identify projects required to address housing needs

3.2 Methodology

3.2.1 End-consumer (reticulation/household level)

1. Confirm current backlogs at ward level
2. Confirm the maximum target levels of service per ward
3. Identify a list of projects that would be needed to eradicate the backlogs
4. Allocate the backlog eradication per ward to specific projects and indicate the number of households to address per ward
5. Estimate the total value of work required to eradicate the backlogs per ward
6. Obtain estimates of the current condition of the networks (refer to age, leakage rates, etc)
7. Identify a list of projects that would be needed to refurbish the existing networks
8. Complete the basic details of each new project, indicating its:
   - 8a Name
   - 8b Status
   - 8c Type and source of funding
   - 8d Target completion date
   - 8e Consolidate the information at project level and indicate any additional costs
   - 8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   - 9a Name
   - 9b Status
   - 9c Type and source of funding
   - 9d Target completion date
   - 9e Consolidate the information at project level and indicate any additional costs
   - 9f Include a reference to any relevant clarifying notes or comments

3.2.2 Assess the bulk supply to all wards

11. Identify the list of bulk supply schemes
12. Allocate the wards to individual supply schemes
13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

TargetLoS	Rates		Volume
Dwelling	R	6 000	20
Yard	R	4 000	12
StdP<200	R	1 800	6
Borehole	R	40 000	-

kiloliter/day

Continues on next page

Condition
5: As new
4: Excellent condition
3: Good - some losses
2: Fair - large losses
1: Poor - significant losses

14 15

Owner	SLA	New Projects Project	Number		Value	Date
				R	-	
				R	-	
				R	-	
				R	-	
				R	-	
				R	-	
				R	-	
				R	-	
				R	-	
				R	-	
				R	-	
			-		**-**	

Owner
Municipal
DWAF
Water Board
Other

Continues from previous

8 8d 8e 8f

ComplDate	Number Houses	Value		Fixed Costs		Total		Comments/Notes	Duration
30-Jun-12	25	R	100 000	R	-	R	100 000		24
30-Jun-12	1 543	R	6 172 000	R	-	R	6 172 000		24
30-Jun-12	623	R	2 492 000	R	-	R	2 492 000		12
30-Jun-13	416	R	1 664 000	R	-	R	1 664 000		12
	-	R	-	R	-	R	-		
	-	R	-	R	-	R	-		
	-	R	-	R	-	R	-		
	-	R	-	R	-	R	-		
	-	R	-	R	-	R	-		
	-	R	-	R	-	R	-		
	2 607	**R**	**10 428 000**	**R**	**-**	**R**	**10 428 000**		
	Eq Unit Rate	**R**	**4 000**						

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Reference to a lookup table
Fixed - information only

9d 9e 9f

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Refurbishment: Planned intervention	Project	Number	Value	Date	Bulk Supply: Supply		Date
1	NC077	Siyathemba Local Municipality		30707001	Urban – Formal			-	R -				#N/A
2	NC077	Siyathemba Local Municipality		30707002	Urban – Formal	Replace entirely		1 045	R 5 015 183	01-Jun-12			00-Jan-00
3	NC077	Siyathemba Local Municipality		30707003	Urban – Formal	Replace entirely		1 436	R 6 894 422	01-Jun-12			00-Jan-00
4	NC077	Siyathemba Local Municipality		30707004	Urban – Formal	Replace entirely		3	1 385	R 6 650 063	01-Jun-12			#N/A
								3 867		**18 559 667**				

7b

12

3. Water

3.1 Objectives

- Confirm the current water backlogs
- Confirm interim and ultimate service levels
- Confirm current condition of infrastructure (for the higher capacity municipalities)
- Identify projects required to address housing needs

3.2 Methodology

3.2.1 End-consumer (reticulation/household level)

1. Confirm current backlogs at ward level
2. Confirm the maximum target levels of service per ward
3. Identify a list of projects that would be needed to eradicate the backlogs
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8. Complete the basic details of each new project, indicating its:
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   - 8b Status
   - 8c Type and source of funding
   - 8d Target completion date
   - 8e Consolidate the information at project level and indicate any additional costs
   - 8f Include a reference to any relevant clarifying notes or comments
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   - 9b Status
   - 9c Type and source of funding
   - 9d Target completion date
   - 9e Consolidate the information at project level and indicate any additional costs
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3.2.2 Assess the bulk supply to all wards

11. Identify the list of bulk supply schemes
12. Allocate the wards to individual supply schemes
13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

	100%
	100%
	80%
	60%
	40%

Planned intervention	
Replace selected elements	20%
Replace more than 50%	70%
Replace entirely	120%

28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-16
-	-	30 000	50 000	20 000	-	-	-
-	-	2 050 000	3 090 000	1 030 000	-	-	-
-	-	-	1 660 000	830 000	-	-	-
-	-	-	-	1 110 000	560 000	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	**-**	**2 080 000**	**4 800 000**	**2 990 000**	**560 000**	**-**	**-**

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Reference to a lookup table
Fixed - information only

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Bulk Capacity
1	NC077	Siyathemba Local Municipality		30707001	Urban – Formal	#N/A
2	NC077	Siyathemba Local Municipality		30707002	Urban – Formal	#VALUE!
3	NC077	Siyathemba Local Municipality		30707003	Urban – Formal	#VALUE!
4	NC077	Siyathemba Local Municipality		30707004	Urban – Formal	#N/A

3. Water

3.1 Objectives

- Confirm the current water backlogs
- Confirm interim and ultimate service levels
- Confirm current condition of infrastructure (for the higher capacity municipalities)
- Identify projects required to address housing needs

3.2 Methodology

3.2.1 End-consumer (reticulation/household level)

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   - 8d Target completion date
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9. Repeat this for the refurbishment projects, indicating its:
   - 9a Name
   - 9b Status
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15. Estimate the extent of these projects

Test

Legend
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Reference to a lookup table
Fixed - information only

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Volume
1	NC077	Siyathemba Local Municipality		30707001	Urban – Formal	0.48
2	NC077	Siyathemba Local Municipality		30707002	Urban – Formal	0.42
3	NC077	Siyathemba Local Municipality		30707003	Urban – Formal	0.57
4	NC077	Siyathemba Local Municipality		30707004	Urban – Formal	0.55
						2.03
						Megaliters/day

Status of Water Reticulation: Access						
Feb-09	Feb-10	Feb-11	Feb-12	Feb-13	Feb-14	Feb-15
98%	98%	98%	98%	100%	100%	100%
-48%	-48%	-48%	-48%	100%	100%	100%
57%	57%	57%	57%	100%	100%	100%
70%	70%	70%	70%	70%	100%	100%
49%	**49%**	**49%**	**49%**	**92%**	**100%**	**100%**

Status of Water Reticulation: Condition							
Feb-09	Feb-10	Feb-11	Feb-12	Feb-13	Feb-14	Feb-15	Feb-09
100%	100%	100%	100%	100%	100%	100%	100%
40%	40%	40%	40%	100%	100%	100%	100%
40%	40%	40%	40%	100%	100%	100%	100%
40%	40%	40%	40%	100%	100%	100%	100%
54%	**54%**	**54%**	**54%**	**100%**	**100%**	**100%**	**100%**

#REF!

#REF!

Colour Ranges	
Limit 1	50%
Limit 2	90%

3. Water

3.1 Objectives

- Confirm the current water backlogs
- Confirm interim and ultimate service levels
- Confirm current condition of infrastructure (for the higher capacity municipalities)
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3.2 Methodology

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Reference to a lookup table
Fixed - information only

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Status of Water Provision: Bulk Supply						Status of Water Reticulation: Condition						
						Feb-10	Feb-11	Feb-12	Feb-13	Feb-14	Feb-15	Feb-09	Feb-10	Feb-11	Feb-12	Feb-13	Feb-14	Feb-15
1	NC077	Siyathemba Local Municipality		30707001	Urban – Formal	100%	100%	100%	100%	100%	100%	98%	98%	98%	98%	100%	100%	100%
2	NC077	Siyathemba Local Municipality		30707002	Urban – Formal	100%	100%	100%	100%	100%	100%	-48%	-48%	-48%	-48%	100%	100%	100%
3	NC077	Siyathemba Local Municipality		30707003	Urban – Formal	100%	100%	100%	100%	100%	100%	40%	40%	40%	40%	100%	100%	100%
4	NC077	Siyathemba Local Municipality		30707004	Urban – Formal	100%	100%	100%	100%	100%	100%	40%	40%	40%	40%	70%	100%	100%
						100%	**100%**	**100%**	**100%**	**100%**	**100%**	**36%**	**36%**	**36%**	**36%**	**92%**	**100%**	**100%**

3. Water

3.1 Objectives

- Confirm the current water backlogs
- Confirm interim and ultimate service levels
- Confirm current condition of infrastructure (for the higher capacity municipalities)
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   - 9c Type and source of funding
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Legend
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Calculated
Reference to a lookup table
Fixed - information only

Input provided: to be confirmed

Lookup list

Titles

Category	Urban/Rural
Commercial Farms	Urban
Rural Village > 5000	Rural
Rural Village < 5000	
Rural Scattered	
Metropolitan	
Urban – Formal	
Urban – Former Township	
Urban – Informal	

Input provided: to be confirmed

Lookup list

Titles

Category

Commercial Farms
Rural Village > 5000
Rural Village < 5000
Rural Scattered
Metropolitan
Urban – Formal
Urban – Former Township
Urban – Informal

ProjectNo	Donor Code	Name	Status	Type Subsidy	Funding Source
1		Prieska 2	Unregistered	Grant	MIG
2		Prieska and Marydale 3	Unregistered	Grant	MIG
3		Prieska and Niekerkshoop 4	Unregistered	Grant	MIG
Total					

Summary of Bulk Water Projects

ProjectNo	Donor Code	Name	Status	Type Subsidy	Funding Source
Total					

Input provided: to be confirmed	ComplDate	Number Houses	Value	Fixed Costs	Total	Comments/Notes	Duration
Lookup list	01-Jun-12	1 045	R 5 015 183	R -	R 5 015 183		16
Titles	01-Jun-12	1 436	R 6 894 422	R -	R 6 894 422		24
	01-Jun-12	1 385	R 6 650 063	R -	R 6 650 063		24
Category		-	R -	R -	R -		
Commercial Farms		-	R -	R -	R -		
Rural Village > 5000		-	R -	R -	R -		
Rural Village < 5000		-	R -	R -	R -		
Rural Scattered		-	R -	R -	R -		
Metropolitan		**3 867**	**R 18 559 667**	**R -**	**R 18 559 667**		
Urban – Formal		**Eq Unit Rate**	**R 4 800**				
Urban – Former Township							
Urban – Informal							

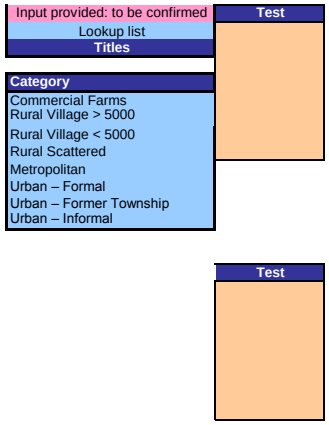
ComplDate	Number Houses	Value	Fixed Costs	Total	Comments/Notes	Duration
	-	R -	R -	R -		
	-	R -	R -	R -		
	-	R -	R -	R -		
	-	R -	R -	R -		
	-	R -	R -	R -		
	-	R -	R -	R -		
	-	R -	R -	R -		
	-	R -	R -	R -		
	-	**R -**	**R -**	**R -**		
	Eq Unit Rate	**#DIV/0!**				

Input provided: to be confirmed
Lookup list
Titles

Category
Commercial Farms
Rural Village > 5000
Rural Village < 5000
Rural Scattered
Metropolitan
Urban – Formal
Urban – Former Township
Urban – Informal

28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-16
-	-	290 000	3 760 000	960 000	-	-	-
-	-	2 560 000	3 450 000	880 000	-	-	-
-	-	2 470 000	3 330 000	850 000	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	**-**	**5 320 000**	**10 540 000**	**2 690 000**	**-**	**-**	**-**

28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-16
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	**-**	**-**	**-**	**-**	**-**	**-**	**-**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Lookup list
Titles
Test
Category
Commercial Farms
Rural Village > 5000
Rural Village < 5000
Rural Scattered
Metropolitan
Urban – Formal
Urban – Former Township
Urban – Informal
Test

Input provided: to be confirmed

Lookup list

Titles

Category
Commercial Farms
Rural Village > 5000
Rural Village < 5000
Rural Scattered
Metropolitan
Urban – Formal
Urban – Former Township
Urban – Informal

Input provided: to be confirmed

Lookup list

Titles

Category
Commercial Farms
Rural Village > 5000
Rural Village < 5000
Rural Scattered
Metropolitan
Urban – Formal
Urban – Former Township
Urban – Informal

Water Treatment Works

Treatment Facility Details

Name of WTW	Class	Process Description	Main Type of Process	Date constructed	Year last upgraded / refurbished	Condition	Refurbishment need as % of replacement	Estimated % of Refurbishment
PRIESKA WTW	C	Conventional	Conventional	1971	1975	Average	45	50

Class	Process Description	Main Type of Process
B	Activated sludge	Advanced
C	Clarifier, Sand filter	Conventional
D	Conventional	Package
E	Dosing	Unknown
Unknown	Flocculation Tanks	
	Modular	

Condition
Average
Good
Not Working
Poor
Unknown

Summary of Water Supply Projects - Treatment Works

ProjectNo	Donor Coc	Name	Status	Type Subsidy	Funding Source	ComplDate	Value	Fixed Costs
							R -	
							R -	R -
							R -	R -
							R -	R -
							R -	R -
							R -	R -
							R -	R -
							R -	R -
							R -	R -
							R -	R -
Total							**R -**	**R -**

Status	Type Subsidy	Funding
Unregistered	Grant	Municipal
Registered	Loan	MIG
Design & Tender	Internal funds	Dept of Housing
Construction	Developer	Private
Complete	Other	DBSA
		Other

Continues on

Name of WTW	Size Category (Ml/day)	Type of water source	% WTW Capacity in Use	Hydraulic Capacity (Ml/day)	% Hydraulic capacity in use	Operating hours per day	Frequency of quality testing	New Projects: Project	New Projects: Value
PRIESKA WTW	large plants (10-100Ml/d)	River	River	**15.0**	33%	16	Weekly		
				15.0					-

Size Category (Ml/day)	Type of water source
large plants (10-100Ml/d)	Canal
medium plants (2-10Ml/d)	Combination
micro plants (<0,5Ml/d)	Dam
small plants (0,5-2Ml/d)	River
Unknown	Surface

Frequency
Annual
Daily
Monthly
Weekly

ProjectNo	Total		Comments/Notes	Duration	Planned Cash Flow: 28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
	R	-			-	-	-	-	-
Total	**R**	**-**			**-**	**-**	**-**	**-**	**-**

00-Jan-00

next page

Continues from previous pext page

Name of WTW	Date
PRIESKA WTW	

ProjectNo	Test
Total	

Sort	Municipal Code	Municipal Name	Ward	WardNo	Category	Urban/Rural	Households 2001	Households 2008	>=RDP	<RDP
1	NC077	Siyathemba Local Municipality	1	30707001	Urban – Formal	Urban	992	1 202	860	131
2	NC077	Siyathemba Local Municipality	2	30707002	Urban – Formal	Urban	862	1 045	858	3
3	NC077	Siyathemba Local Municipality	3	30707003	Urban – Formal	Urban	1185	1 436	703	482
4	NC077	Siyathemba Local Municipality	4	30707004	Urban – Formal	Urban	1143	1 385	667	477
							4 182	**5 069**	**3 088**	**1 093**

Legend
Input required by user
Calculated but can be replaced
Calculated
Reference to a lookup table
Fixed - information only
Input provided: to be confirmed
Lookup list
Titles

Category	Urban/Rural
Commercial Farms	Urban
Rural Village > 5000	Rural
Rural Village < 5000	
Rural Scattered	
Metropolitan	
Urban – Formal	
Urban – Former Township	
Urban – Informal	

4. Sanitation

4.1 Objectives

• Confirm the current sanitation backlogs
• Confirm interim and ultimate service levels
• Confirm current condition of infrastructure (for the higher capacity municipalities)
• Identify projects required to address housing needs

4.2 Methodology

4.2.1 End-consumer (reticulation/household level)

1. Confirm current backlogs at ward level
2. Confirm the maximum target levels of service per ward
3. Identify a list of projects that would be needed to eradicate the backlogs
4. Allocate the backlog eradication per ward to specific projects and indicate the number of households to address per ward
5. Estimate the total value of work required to eradicate the backlogs per ward
6. Obtain estimates of the current condition of the networks (refer to age, leakage rates, etc)
7. Identify a list of projects that would be needed to refurbish the existing networks
8. Complete the basic details of each new project, indicating its:
   8a Name
   8b Status
   8c Type and source of funding
   8d Target completion date
   8e Consolidate the information at project level and indicate any additional costs
   8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   9a Name
   9b Status
   9c Type and source of funding
   9d Target completion date
   9e Consolidate the information at project level and indicate any additional costs
   9f Include a reference to any relevant clarifying notes or comments

4.2.2 Assess the bulk supply to all wards

11. Identify the list of bulk waste water schemes
12. Allocate the wards to individual waste water schemes
13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

11

Scheme	Name
None	

3

ProjectNo	Donor Code
1	
2	
3	
4	
Total	

7a

ProjectNo	Donor Code
Total	

ProjectNo	Donor Code
Total	

eft pages)

Sort	Municipal Code	Municipal Name	Ward	WardNo	<RDP%	Current Backlog (2008) <RDP%	<RDP	Upd<RDP%	Target Le TargetLoS
1	NC077	Siyathemba Local Municipality	1	30707001	13%	13%	12	1%	FlushWBS
2	NC077	Siyathemba Local Municipality	2	30707002	0%	0%	1 848	177%	FlushWBS
3	NC077	Siyathemba Local Municipality	3	30707003	41%	41%	805	56%	VIP
4	NC077	Siyathemba Local Municipality	4	30707004	42%	42%	402	29%	VIP
					26%	**61%**	**3 067**	**61%**	

1

3

Bulk Waste Water Schemes

Need	Ratio	Capacity	Release to	New Projects Owner
-	100%			
-	100%			
-	100%			
-	100%			
-	100%	-		
-	100%			
-	100%			
-	100%			
-	100%			
-	100%			
-	100%			
-	100%			
-	100%			
-	100%			
-	100%			
-	**100%**	**-**		

4. Sanitation

4.1 Objectives

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   - 8f Include a reference to any relevant clarifying notes or comments
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   - 9a Name
   - 9b Status
   - 9c Type and source of funding
   - 9d Target completion date
   - 9e Consolidate the information at project level and indicate any additional costs
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13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

Type	Owner
Dam	Municipal
Groundwate	DWAF
River	Water
Other	Other

8a 8b 8 8d

Summary of Sanitation Projects - Reticulation

Name	Status	Type Subsic	Funding Source	ComplDate
Ethembeni 12	Unregistered	Grant	DWAF	30-Jun-12
Prieska 1541	Unregistered	Grant	DWAF	30-Jun-12
Marydale 613	Unregistered	Grant	DWAF	30-Jun-12
Niekerkshoop 402	Unregistered	Grant	DWAF	30-Jun-13

Status	Type Subsic	Funding
Unregistered	Grant	Municipal
Registered	Loan	MIG
Design &	Internal	DWAF
Construction	Developer	Private
Complete	Other	DBSA
		Other

Continue pa

9a 9b 9 9d

Summary of Sanitation Refurbishment Projects - Reticulation and o

Name	Status	Type Subsic	Funding Source	ComplDate

Summary of Bulk Sanitation Projects

Name	Status	Type Subsic	Funding Source	ComplDate

Sort	Municipal Code	Municipal Name	Ward	WardNo	Level of Service Rate	New Projects Project	New Projects Number	New Projects Value	New Projects Date	Refurbishment Description	Refurbishment Status	Refurbishment Planned intervention	Refurbishment Project	Refurbishment Number	Refurbishment Value	Refurbishment Date	Refurbishment Bulk Service	Refurbishment Date
1	NC077	Siyathemba Local Municipality	1	30707001	R 10 000	1	12	R 120 000	30-Jun-12	VIP'S?					R -			#N/A
2	NC077	Siyathemba Local Municipality	2	30707002	R 10 000	2	1 848	R 18 480 000	30-Jun-12	VIP'S?					R -			#N/A
3	NC077	Siyathemba Local Municipality	3	30707003	R 8 000	3	805	R 6 440 000	30-Jun-12	VIP'S?					R -			#N/A
4	NC077	Siyathemba Local Municipality	4	30707004	R 8 000	4	402	R 3 216 000	30-Jun-13	VIP'S?					R -			#N/A
							3 067	28 256 000					-	-	R -			

(2) (4) (5) (6) (7b)

TargetLoS	Rates	Volume
FlushWBS	R 10 000	12
FlushSeptic	R 4 000	-
Chemical	R 12 000	-
VIP	R 8 000	-

kiloliter/day

Condition	Planned intervention
5: As new	Replace selected elements
4: Excellent condition	Replace more than 50%
3: Good - some losses	Replace entirely
2: Fair - large losses	
1: Poor - significant losses	

(14) (15)

SLA	Project	Number	Value	Date
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
			R -	
		-	-	

4. Sanitation

4.1 Objectives

- Confirm the current sanitation backlogs
- Confirm interim and ultimate service levels
- Confirm current condition of infrastructure (for the higher capacity municipalities)
- Identify projects required to address housing needs

4.2 Methodology

4.2.1 End-consumer (reticulation/household level)

1. Confirm current backlogs at ward level
2. Confirm the maximum target levels of service per ward
3. Identify a list of projects that would be needed to eradicate the backlogs
4. Allocate the backlog eradication per ward to specific projects and indicate the number of households to addr
5. Estimate the total value of work required to eradicate the backlogs per ward
6. Obtain estimates of the current condition of the networks (refer to age, leakage rates, etc)
7. Identify a list of projects that would be needed to refurbish the existing networks
8. Complete the basic details of each new project, indicating its:
   - 8a Name
   - 8b Status
   - 8c Type and source of funding
   - 8d Target completion date
   - 8e Consolidate the information at project level and indicate any additional costs
   - 8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   - 9a Name
   - 9b Status
   - 9c Type and source of funding
   - 9d Target completion date
   - 9e Consolidate the information at project level and indicate any additional costs
   - 9f Include a reference to any relevant clarifying notes or comments

4.2.2 Assess the bulk supply to all wards

11. Identify the list of bulk waste water schemes
12. Allocate the wards to individual waste water schemes
13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

(8e) (8f)

Number Houses	Value	Fixed Costs	Total	Comments/Notes	Duration	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-16
12	R 120 000	R -	R 120 000	Backlog eradicated with housing pro	24	-	-	40 000	60 000	20 000	-	-	-
1 848	R 18 480 000	R -	R 18 480 000	Backlog eradicated with housing pro	24	-	-	6 130 000	9 240 000	3 090 000	-	-	-
805	R 6 440 000	R -	R 6 440 000	Backlog eradicated with housing pro	12	-	-	-	4 290 000	2 150 000	-	-	-
402	R 3 216 000	R -	R 3 216 000	Backlog eradicated with housing pro	12	-	-	-	-	2 140 000	1 070 000	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
3 067	R 28 256 000	R -	R 28 256 000			-	-	6 170 000	13 590 000	7 400 000	1 070 000	-	-
Eq Unit Rate	R 9 213												

s on next ge

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(9e) (9f)

thers

Number Houses	Value	Fixed Costs	Total	Comments/Notes	Duration	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-16
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
Eq Unit Rate	#DIV/0!												

Number Houses	Value	Fixed Costs	Total	Comments/Notes	Duration	01-Mar-09	01-Mar-10	01-Mar-11	29-Feb-12	29-Feb-12	29-Feb-12	29-Feb-12	29-Feb-12
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
-	R -	R -	R -			-	-	-	-	-	-	-	-
Eq Unit Rate	#DIV/0!												

Sort	Municipal Code	Municipal Name	Ward	WardNo	Bulk Services	
					Bulk Capacity	Volume
1	NC077	Siyathemba Local Municipality	1	30707001	#N/A	0.48
2	NC077	Siyathemba Local Municipality	2	30707002	#N/A	0.42
3	NC077	Siyathemba Local Municipality	3	30707003	#N/A	-
4	NC077	Siyathemba Local Municipality	4	30707004	#N/A	-
						0.90

Megaliters/day

4. Sanitation

4.1 Objectives

• Confirm the current sanitation backlogs
• Confirm interim and ultimate service levels
• Confirm current condition of infrastructure (for the higher capacity municipalities)
• Identify projects required to address housing needs

4.2 Methodology

4.2.1 End-consumer (reticulation/household level)

1. Confirm current backlogs at ward level
2. Confirm the maximum target levels of service per ward
3. Identify a list of projects that would be needed to eradicate the backlogs
4. Allocate the backlog eradication per ward to specific projects and indicate the number of households to add
5. Estimate the total value of work required to eradicate the backlogs per ward
6. Obtain estimates of the current condition of the networks (refer to age, leakage rates, etc)
7. Identify a list of projects that would be needed to refurbish the existing networks
8. Complete the basic details of each new project, indicating its:
   8a Name
   8b Status
   8c Type and source of funding
   8d Target completion date
   8e Consolidate the information at project level and indicate any additional costs
   8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   9a Name
   9b Status
   9c Type and source of funding
   9d Target completion date
   9e Consolidate the information at project level and indicate any additional costs
   9f Include a reference to any relevant clarifying notes or comments

4.2.2 Assess the bulk supply to all wards

11. Identify the list of bulk waste water schemes
12. Allocate the wards to individual waste water schemes
13. Assess the sufficiency of the schemes
14. Identify projects to upgrade the schemes
15. Estimate the extent of these projects

Test

Test

Test

Sort	Municipal Code	Municipal Name	Ward	WardNo	Status of Water Reticulation: Access							Status of Water Reticulation: Condition							Status of Water Reticulation: Bulk Supply							Status of Water Reticulat			
					28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12
1	NC077	Siyathemba Local Municipality	1	30707001	99%	99%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	99%
2	NC077	Siyathemba Local Municipality	2	30707002	-77%	-77%	-77%	-77%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	-77%	-77%	-77%	-77%
3	NC077	Siyathemba Local Municipality	3	30707003	44%	44%	44%	44%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	44%	44%	44%	44%
4	NC077	Siyathemba Local Municipality	4	30707004	71%	71%	71%	71%	71%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	71%	71%	71%	71%
					39%	**39%**	**39%**	**39%**	**92%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**39%**	**39%**	**39%**	**39%**

12

Colour Ranges	
Limit 1	50%
Limit 2	90%

4. Sanitation

4.1 Objectives

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   8b Status
   8c Type and source of funding
   8d Target completion date
   8e Consolidate the information at project level and indicate any additional costs
   8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   9a Name
   9b Status
   9c Type and source of funding
   9d Target completion date
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					ion: Condition		
Sort	Municipal Code	Municipal Name	Ward	WardNo	28-Feb-13	28-Feb-14	28-Feb-15
1	NC077	Siyathemba Local Municipality	1	30707001	100%	100%	100%
2	NC077	Siyathemba Local Municipality	2	30707002	100%	100%	100%
3	NC077	Siyathemba Local Municipality	3	30707003	100%	100%	100%
4	NC077	Siyathemba Local Municipality	4	30707004	71%	100%	100%
					92%	**100%**	**100%**

4. Sanitation

4.1 Objectives

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   8b Status
   8c Type and source of funding
   8d Target completion date
   8e Consolidate the information at project level and indicate any additional costs
   8f Include a reference to any relevant clarifying notes or comments
9. Repeat this for the refurbishment projects, indicating its:
   9a Name
   9b Status
   9c Type and source of funding
   9d Target completion date
   9e Consolidate the information at project level and indicate any additional costs
   9f Include a reference to any relevant clarifying notes or comments

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Waste Water Treatment Works

Treatment Facility

Name of WWTW	Class	Process Description	Main Type of Process	Date constructed	Year last upgraded / refurbished	Condition
PRIESKA WWTW	E	Oxidation ponds	Oxidation ponds	1990	2008	Good

Class	Process Description	Main Type of Proces
B	Activated sludge	Activated Sludge
C	Activated sludge and bio-filter	Bio-filter
D	Bio filtration	Oxidation ponds
E	Oxidation ponds	Unknown
Unknown	Trickling filter, solid contact	

Condition
Average
Good
Not Working
Poor
Unknown

Summary of Water Projects - Waste Water Treatment Works

ProjectNo	Donor Code	Name	Status	Type Subsidy	Funding Source	ComplDate
None						
Total						

Status	Type Subsidy	Funding
Unregistered	Grant	Municipal
Registered	Loan	MIG
Design & Tender	Internal funds	Dept of Housing
Construction	Developer	Private
Complete	Other	DBSA
		Other

Details									New Projects		
Refurbishment need as % of replacement	Estimated % of Refurbishment	Size Category (Ml/day)	Receiving Water Body	% WWTW Capacity in Use	Hydraulic Capacity (Ml/day)	% Hydraulic capacity in use	Operating hours per day	Frequency of quality testing	Project	Value	Date
0	0	medium plants (2-10Ml/d)	River	River	**3.0**	60%	24	Monthly	None		
					3.0					-	

Size Category (Ml/day)	Type of water source
large plants (10-100Ml/d)	Canal
medium plants (2-10Ml/d)	Combination
micro plants (<0,5Ml/d)	Dam
small plants (0,5-2Ml/d)	River
Unknown	Surface

Frequency
Annual
Daily
Monthly
Weekly

					Planned Cash Flow					
Value	Fixed Costs	Total	Comments/Notes	Duration	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	Test
R -	R -	R -	No Need for Sewage works projects		-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	R -	R -			-	-	-	-	-	
R -	**R -**	**R -**			**-**	**-**	**-**	**-**	**-**	

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5.1: Roads

Sort	Ward	WardNo	Category	Urban/Rural	2008	Length	Paved % Paved	Paved Length	Paved Condition	Unpaved % Unpaved	Unpaved Length	Unpaved Condition	Intervention	Roads Projects Project	Roads Projects Length	Cost
1	1	30707001	Urban – Formal	Urban	1 202	19	5%	1.0	Fair	95%	15.2	Poor	Major upgrade	1	15.2	4 560 000
2	2	30707002	Urban – Formal	Urban	2 569	41	5%	1.8	Fair	95%	32.0	Poor	Major upgrade	2	32.0	9 600 000
3	3	30707003	Urban – Formal	Urban	2 043	33	12%	3.0	Fair	88%	27.0	Poor	Major upgrade	3	27.0	8 100 000
4	4	30707004	Urban – Formal	Urban	1 385	22	11%	1.8	Fair	89%	18.5	Poor	Major upgrade	4	18.5	5 550 000
	Totals				**7 200**	**115**		**7.6**	**53.6%**		**92.7**	**147.9%**			**93**	**27 810 000**

100%

Legend
Input required by user
Calculated but can be replaced
Calculated
Reference to a lookup table
Fixed - information only
Input provided: to be confirmed
Lookup list
Titles

1 2 3 4 6 7

Condition	Interventions
As new	Rebuild
Very good	Major upgrade
Good	Surface treatments
Poor	Minor upgrade
Fair	Patching

5 8 9 10

ProjectNo	Donor Code	Name	Status	Type Subsidy	Funding Source	ComplDate	Number of Kms	Value
1		ETHEMBENI	Unregistered	Grant	MIG	01-Sep-12	15	R 4 560 000
2		Prieska	Construction	Grant	MIG	01-Sep-10	32	R 9 600 000
3		Marydale	Unregistered	Grant	MIG	01-Sep-11	27	R 8 100 000
4		Niekerkshoop	Unregistered	Grant	MIG	01-Sep-12	19	R 5 550 000
							-	R -
							-	R -
							-	R -
							-	R -
Total							**93**	**R 27 810 000**

Status	Type Subsidy	Funding
Unregistered	Grant	Municipal
Registered	Loan	Donor
Design & Tender	Other	MIG
Construction		Private
Complete		Other

Continues on next page

5 Roads

5.1 Objective

1. Confirm the need for road upgrading
2. Identify projects required to address housing needs

5.2 Methodology

1. Assess length of roads in the municipality
2. Assess the ratio of paved roads
3. Assess the condition of the paved roads
4. Assess the condition of the unpaved roads
5. Identify a list of projects that would be needed to eradicate the backlogs
6. For each ward, allocate the housing backlogs to a housing project
7. Estimated costs of these projects per ward using either a standard price, or modify it as required
8. Indicate the type of subsidy or funding to be used for the project(s) - refer to the next sheet for details of the different housing schemes
9. Indicate the funding source for the housing project(s)
10. Provide the estimated completion dates for these projects
11. Add any fixed costs per project (allow for rezoing, EIA, land purchases and othe rfixed costs)
12. Add reference to clarifying notes per project

Sort	Ward	WardNo	Comments/Notes
1	1	30707001	Future projects
2	2	30707002	Future projects
3	3	30707003	Future projects
4	4	30707004	Future projects
	Totals		

5 Roads

5.1 Objective

1. Confirm the need for road upgrading
2. Identify projects required to address housing

5.2 Methodology

1. Assess length of roads in the municipality
2. Assess the ratio of paved roads
3. Assess the condition of the paved roads
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6. For each ward, allocate the housing backlog
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8. Indicate the type of subsidy or funding to be sheet for details of the different housing schem
9. Indicate the funding source for the housing p
10. Provide the estimated completion dates for
11. Add any fixed costs per project (allow for re costs)
12. Add reference to clarifying notes per projec

11 12

Fixed Costs	Total	Comments/Notes	Duration	28-Feb-09	28-Feb-10	28-Feb-11	29-Feb-12	28-Feb-13	28-Feb-14	28-Feb-15	Test
R -	R 4 560 000		12	-	-	-	2 250 000	2 310 000	-	-	
R -	R 9 600 000		12	-	4 730 000	4 870 000	-	-	-	-	
R -	R 8 100 000		12	-	-	3 990 000	4 080 000	-	-	-	
R -	R 5 550 000		12	-	-	-	2 740 000	2 810 000	-	-	
R -	R -			-	-	-	-	-	-	-	
R -	R -			-	-	-	-	-	-	-	
R -	R -			-	-	-	-	-	-	-	
R -	R -			-	-	-	-	-	-	-	
R -	**R 27 810 000**			**-**	**4 730 000**	**8 860 000**	**9 070 000**	**5 120 000**	**-**	**-**	

Continues from previous pext page

5.1: Summary Institutional Arrangements

Focus Area	Question	Technical Services	Possible Answers
Operational	Asset management plan approved by Council	No	Yes/No
	Audited asset register compiled	No	Yes/No
	% of service interruptions lasting > 48h	0%	%
	% of service interruptions lasting > 24h	0%	%
	% of service interruptions lasting > 6h	5%	%
	Who is the Water Services Authority?	Local Municipality	Local/District
	Have the water services finances are ring-fenced	No	Yes/No
	Independent & separate financial audit undertaken	Yes	Yes/No
Focus Area	**Question**	**Technical Services**	
Strategic intent & Structure	Are Performance Agreements for the Technical Section 57 Managers in place?	No	Yes/No
	Does the Performance Agreement of Sections 57 Manager reflect the strategic priorities of the Municipality?	No	Yes/No
	Are job descriptions of subordinates of Section 57 Managers aligned with performance agreements of these managers?	No	Yes/No
	Is the organisational structure aligned with the strategic objectives and performance agreements of the municipal manager	Yes	Yes/No
Procedures & Job Descriptions	Are procedures of each department documented/mapped	No	Yes/No
	Are job descriptions alligned with documented procedures?	No	Yes/No
	Has the structure of the Municipality changed? If yes please give details of changes to structure.	No	Yes/No
	Have any functions been added to/ taken away from the various Departments ? If yes, please indicate which functions have been added/taken away	No	Yes/No
	Are job descriptions available for all filled posts of the Municipality?	Yes	Yes/No
	Please indicate the percentage of posts for which job descriptions do exist.	95%	%
	Have job descriptions been updated where changes to the organisational structure of the Municipality have been effected?	No	Yes/No
	Are job descriptions in line with the prescribed regulations?	Yes	Yes/No
	Does the Municipality have a formal Job Evaluation Policy in place?	No	Yes/No
Recruiting	Are all vacant/new posts subjected to job evaluation before being advertised? Please explain process followed	No	Yes/No
	Have all new/upgraded posts on the approved new structure of the office of the Municipality being subjected to job evaluation?	No	Yes/No
	Have all strategic vacant posts been identified for filling?	Yes	Yes/No
	Is budget available for filling of strategic vacant posts?	Yes	Yes/No

5.2 Institutional Structure and Vacancies

	Number of Positions on Org Structure				Number of Posts Filled by Permanent Staff				Number of Posts Filled by Temporary/Seconded Staff				Number of Vacancies			
	Top Level Official	Mid-Level Manage-ment	Operational Manage-ment Staff		Top Level Official	Mid-Level Manage-ment	Operational Manage-ment Staff		Top Level Official	Mid-Level Manage-ment	Operational Manage-ment Staff		Top Level Official	Mid-Level Manage-ment	Operational Manage-ment Staff	
Responsibilities	**Strategic**	**Tactical**	**Operational**	**General Labour**	**Strategic**	**Tactical**	**Operational**	**General Labour**	**Strategic**	**Tactical**	**Operational**	**General Labour**	**Strategic**	**Tactical**	**Operational**	**General Labour**
Policy formulation (e.g. agree on service levels, etc)	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0
Budgeting	1	1	0	0	1	1	0	0	1	0	0	0	-1	0	0	0
Planning for service provision	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0
Design & calling for tenders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction, supervision and commissioning of new works	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operations	0	1	1	65	0	1	1	65	0	0	0	0	0	0	0	0
Maintenance, rehabilitation and refurbishment	0	1	1	65	0	1	1	65	0	0	0	0	0	0	0	0
Trading (i.e. meter reading, billing, collection, and enforcement)	0	1	1	4	0	1	1	4	0	0	0	0	0	0	0	0
Awareness and community involvement	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0

Note:
Items in bright yellow required
Items in light yellow optional
Indicate the numer of staff in each of these positions

5.3: Constraints Experienced in Implementing Projects

				Indicate the extent to which project delivery is affected	
Main Cat	**Main Category**	**Sub Category**	**Nature of Problems**	**Severity**	**Impact**
1	Municipal functions impacting on project implementation	Policy issues	Unclear policies wrt levels of service resulting in inappropriate designs and lack of affordability	3: Slight challenge	3: 20% or more affected
		Admin issues with approvals	Late submission of registration forms and time taken by the department to approve the projects procurement processes	1: Serious unresolved problems	2: 50% or more afftected
			Late approvals of projects	4: Handled Acceptably	3: 20% or more affected
			Legal and administrative challenges	4: Handled Acceptably	3: 20% or more affected
		Admin issues with payment, lacking financial skills	Municipal Supply Chain Management processes not engaged efficiently	4: Handled Acceptably	3: 20% or more affected
			Late funding approvals received from other spheres of government	2: Challenges in addressing problems	2: 50% or more afftected
			Late submission of claims	4: Handled Acceptably	4: 10% or more affected
			Administrative problems: financial sections are failing to process claims by consultants/contractors	4: Handled Acceptably	4: 10% or more affected
		Late delivery of municipal budgets	The delay in the approval of the municipal capital budgets has prevented municipalities from implementing MIG projects.	4: Handled Acceptably	4: 10% or more affected
		Admin issues with procurement	Procurement and BEE issues	4: Handled Acceptably	4: 10% or more affected
			Time taken for approval by council	4: Handled Acceptably	5: No impact
		Land & EIA approval	EIA approval	3: Slight challenge	1: All projects affected
			Land issues not concluded	5: Very Good Support	4: 10% or more affected
			Technical Reports and EIA reports	4: Handled Acceptably	4: 10% or more affected
		Technical issues	IDP under revision	4: Handled Acceptably	4: 10% or more affected
			Lack of coordinated planning of infrastructure	2: Challenges in addressing problems	1: All projects affected
			Inappropriate technical solutions for the specific situation in a municipality	3: Slight challenge	3: 20% or more affected
			Lack of technical reports and baseline information	4: Handled Acceptably	3: 20% or more affected
			Lack of technical skills and capacity	2: Challenges in addressing problems	1: All projects affected
			Lack of bulk supplies	4: Handled Acceptably	3: 20% or more affected
			Insufficient allowance or consideration of geotechnical conditions on site.	4: Handled Acceptably	3: 20% or more affected
		O&M capacity	Limited maintenance and operations budget prevents further infrastructure development	1: Serious unresolved problems	1: All projects affected
2	MIG implementation	Poor project management	Limited Project Management and planning capacity	2: Challenges in addressing problems	1: All projects affected
			PMU not having adequate capacity	2: Challenges in addressing problems	1: All projects affected
3	Contractors & consultants	Project management of contractors	Capacity of consulting engineer not sufficient	3: Slight challenge	4: 10% or more affected
			Lack of materials due to supplier shortages	4: Handled Acceptably	4: 10% or more affected
			Contractors are not monitored to ensure that projects are completed	4: Handled Acceptably	4: 10% or more affected
			Fluid labour market	4: Handled Acceptably	4: 10% or more affected
			Problems with empowerment joint ventures	4: Handled Acceptably	3: 20% or more affected
			Delay getting emerging contractors on site	3: Slight challenge	2: 50% or more afftected
4	Other government functionaries	DPLG	Awaiting **dplg** to register projects	3: Slight challenge	2: 50% or more afftected
			Late approval of projects by the dplg	2: Challenges in addressing problems	2: 50% or more afftected
		DWAF	Delays in approval of the technical report from DWAF	4: Handled Acceptably	4: 10% or more affected
5	External parties	Community involvement	The community is preventing some of the registered projects from being implemented	5: Very Good Support	5: No impact

Notes:
Please indicate the extent to which the different issues above are affecting project delivery

Severity	Impact
1: Serious unresolved problems	1: All projects affected
2: Challenges in addressing problems	2: 50% or more afftected
3: Slight challenge	3: 20% or more affected
4: Handled Acceptably	4: 10% or more affected
5: Very Good Support	5: No impact

WATER	Number of Assets	Ave Replacement Value	Equivalent Expected Useful Life	Ave Residual Value (%)	Ave O&M %	REPLACEMENT VALUE (model)	REPLACEMENT VALUE (modify, if different)	ANNUAL DEPRECIATION	ANNUAL O&M
Water treatment works (Total Ml/day)	1	25 000 000	30	50%	1.50%	25 000 000	**25 000 000**	416 667	375 000
Water treatment plants (filtering & dosing)	1	150 000	15	80%	4.00%	150 000	**150 000**	2 000	6 000
Dams	0	-	100	60%	0.60%	-	**-**	-	-
Reservoirs	9	3 300 000	50	60%	0.24%	29 700 000	**29 700 000**	237 600	71 280
Pump stations	2	1 000 000	22	60%	6.00%	2 000 000	**2 000 000**	36 364	120 000
Boreholes	12	150 000	30	30%	5.70%	1 800 000	**1 800 000**	42 000	102 600
Bulk pipeline (km)	8	550 000	60	20%	0.44%	4 400 000	**4 400 000**	58 667	19 360
Reticulation (km)	95	280 000	60	20%	0.44%	26 600 000	**26 600 000**	354 667	117 040
					TOTAL	**89 650 000**	**89 650 000**	**1 147 964**	**811 280**
SANITATION									
Sewage treatment works (Total Ml/day)	3	6 000 000	28	60%	2.00%	18 000 000	**18 000 000**	257 143	360 000
Pump Stations	3	1 000 000	22	40%	6.00%	3 000 000	**3 000 000**	81 818	180 000
Bulk pipelines (km)	6	550 000	60	20%	0.44%	3 300 000	**3 300 000**	44 000	14 520
Reticulation (km)	87	280 000	60	20%	0.44%	24 360 000	**24 360 000**	324 800	107 184
					TOTAL	**48 660 000**	**48 660 000**	**707 761**	**661 704**
ROADS									
Paved road (km)	7	1 600 000	15	40%	2.00%	11 200 000	**11 200 000**	448 000	224 000
Unpaved road (km)	92	200 000	15	40%	4.00%	18 400 000	**18 400 000**	736 000	736 000
					TOTAL	**29 600 000**	**29 600 000**	**1 184 000**	**960 000**
					Grand Total	**167 910 000**	**167 910 000**	**3 039 725**	**2 432 984**

Note:

The values provided here are indicative values that should only be used in th ecase where no other data is available.

Sectoral Plans

Index

1. Scheme Regulations
2. Land - Use Control Policy
3. Employment Equity Plan
4. Fleet Management Plan
5. Environmental Management Plan
6. Spatial Development Framework

HANDLEIDING EN PROSEDURE VIR AANSOEKE TEN OPSIGTE VAN GRONDGEBRUIKBESTUUR VIR

SIYATHEMBA MUNISIPALITEIT

JUNIE 2005

Siyathemba Munisipaliteit
Posbus 16
Prieska
8940

Tel: (053) - 353 5300

VIR DIE SIYATHEMBA MUNISIPALE BESTUURSGEBIED

Die doel van hierdie dokument is om die Raad, amptenare en lede van die publiek behulpsaam te wees met die indiening, prosessering en afhandeling van enige aansoek ten opsigte van grondgebruikbestuur binne die bestuursgebied van Siyathemba Munisipaliteit.

Hierdie handleiding bestaan uit die volgende afdelings:

A Algemeen
B Vorm van Aansoeke
C Prosedures
D Advertering
E Tydskale
F Verval van Gebruiksregte
G Algemene Beginsels en Beleid
H Ruimtelike Riglyne
I Gebiede van voorkeur hersonerings
J Vrygestelde Onderverdelings
K Onderverdlings onderhewig aan die minimum advertensie prosedure

A Algemeen

1. Hierdie Handleiding dien ter ondersteuning van aansoeke rakende die Raad se grondgebruiksbeheer en bestuur en moet saam met die Raad se Regulasies, veral die Algemene Deel (Afdeling 4) en AWoordbepalings@, van die regulasies gelees word.

2. Aansoekers word aangeraai om soveel inligting moontlik te verskaf, aangesien onvolledige inligting tot vertragings aanleiding gee.

3. Tensy aansoekers anders versoek, sal alle korrespondensie met betrekking tot enige aansoek gevoer word in die taal waarin die aansoekvorm ingevul is (verkieslik Afrikaans - die taal waarin Raadsvergaderings gehou word).

4. Wanneer 'n aansoek verskeie goedkeurings ingevolge verskillende wetgewing vereis en twee of meer van die aansoeke geadverteer moet word, moet die aansoeker die Munisipale Bestuurder daarop wys, sodat al sodanige aansoeke gelyktydig geadverteer en vir goedkeuring voorgelê kan word.

5. Aansoekers se aandag word spesifiek gevestig op die volgende vereistes en voorwaardes:

   a. **Foutiewe en onvolledige aansoeke sal summier teruggestuur** word, aangesien sodanige aansoeke vertragings aan die hand werk en ook aansoekers wat wél deeglike aansoeke opstel, benadeel.
   b. Aansoekers moet self betrokke wees by hul aansoeke en moet toesien dat hul eie personeel of instansies wat namens hulle optree, nie die proses onnodig vertraag nie.

   c. Aansoekers moet daarop let dat, tot tyd-en-wyl 'n aansoek skriftelik goedgekeur is, enige korrespondensie of samesprekings wat ten opsigte van hierdie aansoek gevoer is, nie beskou moet word as 'n aanduiding dat dit wél goedgekeur sal word nie en die Plaaslike Owerheid of Administrasie geensins bind nie.
   d. Geen aansoek mag deur >n amptenaar van die Raad, namens >n ander persoon of instansie, voorberei of ingedien word nie.
   e. Die Plaaslike Owerheid behou die reg voor om enige goedkeuring wat op verkeerde inligting van 'n aansoeker gebaseer is, nietig te verklaar. Aansoekers moet dus

verseker dat alle inligting, ten opsigte van beperkende aspekte wat die aansoek kan beïnvloed, verstrek word.

6. Aansoekers word aangeraai om hul aansoeke en die prosedures vooraf met die betrokke amptenaar van die Raad te bespreek.

7. Aansoekers word daarop gewys dat die mees gepaste en beperkende sonering wat sal geld vir die voorgenome gebruik/ontwikkeling van die perseel, deur die Raad/LUR oorweeg sal word en dat aansoeke as sulks ingedien moet word.

8. Die woordbepaling soos in die Skemaregulasies van die Raad is ook van toepassing op hierdie Handleiding.

B Vorm van Aansoeke

1. AANSOEKVORM

Aangeheg tot hierdie Handleiding is die Raad se goedgekeurde aansoekvorm. Die korrekte en volledige voltooiing van hierdie aansoekvorm is >n voorvereiste vir enige aansoek wat by die Raad ingedien word. Bykomend tot hierdie aansoekvorm en ter ondersteuning van die aansoek, moet die volgende ook deel uitmaak van enige aansoek, tensy die Raad skriftelik anders aangedui het:

2. PLANNE EN KAARTE

Die volgende planne en kaarte moet die aansoek tesame met die inligting wat hieronder vermeld word, vergesel:

2.1 Liggingskaart t.o.v. die dorp of streek

Die aansoek moet vergesel word van 'n duidelike leesbare A3- of A4-grootte afskrif van die 1:50000 topokadestrale kaartreeks of enige soortgelyke kaartreeks of enige soortgelyke kaart van die betrokke dorp of streek waarop die volgende detail aangetoon is, ingedien word:

- ware noord, sleutel en opskrif "*Streeksligging*";
- die benaderde ligging, relatief tot die res van die dorp of streek, van die grondeenheid wat by die aansoek betrokke is; en
- enige ander toepaslike gegewens.

2.2 Plaaslike Liggingskaart

Alle aansoeke moet verder vergesel wees van 'n liggingskaart van papiergroote A4 of A3 wat verkieslik op 'n skaal van 1:5000 is (of indien dit nie moontlik is nie, op 'n skaal van ongeveer dieselfde grootte). Indien 'n ortofoto beskikbaar is, kan 'n afskrif hiervan as liggingskaart dien. Die kaart moet die volgende detail aantoon:

- Die skaal, ware noord, sleutel en opskrif "*Plaaslike Liggingskaart*".
- Erfgrense met omliggende erf- of plaasnommers daarop.
- Grootte en ligging van die betrokke gedeelte.
- Straatname en ligging van bestaande geboue op die betrokke grondeenheid en op direk aangrensende grondeenhede.
- Paaie, met aanduiding of dit hoof-, groot-, nasionale- of provinsiale paaie is.
- Plaaslike- en ander owerheidsgrense, ens.
- Enige fisiese beperkinge op die grondeenheid of omliggende grondeenhede wat die aansoek kan beïnvloed.
- Enige ander toepaslike gegewens.

2.3 Soneringskaart

Alle hersonerings- en/of onderverdelingsaansoeke moet vergesel word van een kopie van 'n uittreksel uit die Raad se soneringskaart, waarop die volgende detail aangetoon word:

- Die skaal, ware noord, sleutel en opskrif "*Soneringskaart*".
- Alle grondeenhede en bestaande sonerings daarvan binne >n radius van 300m van die buitegrens van die aansoekgebied asook alle onontwikkelde grondeenhede.

2.4 Grondgebruikskaart

Waar die huidige grondgebruike verskil van die betrokke sonerings van die aansoekgebied, of indien deur die Raad versoek, moet die aansoek ook van >n kaart wat die huidige gebruike van alle grond op die kaart aantoon, vergesel word.

2.5 Uitlegplan

Alle aansoeke vir onderverdeling, hersonering tot onderverdelingsgebiede en alle aansoeke waar die detail van die aansoek belangrik is vir die goedkeuring van die aansoek (byvoorbeeld, hersonering vir hipermarkte, vakansieoorde, groepsbehuising, nywerheids onderverdelings, ens.), moet vergesel wees van 'n uitlegplan op een van die internasionale papiergroottes A0 tot A4 (verkieslik so klein as moontlik) op een van die volgende skale: 1:5000; 1:1000; 1:2500, wat die volgende aantoon:

- Die skaal, ware noord, sleutel en opskrif "*Uitlegplan*", asook die nommer van die plan (wysigings van die plan moet daaropvolgende nommers hê).
  Kontoere met 1m of 2m hoogte verskille tot buite die uitleggrens.
- Alle gebiede steiler as 1:4.
- 1:50 Jaar vloedlyn, indien van toepassing.
- Ander fisiese beperkinge wat die uitleg kan beïnvloed (byvoorbeeld, kranse, moerasse, duine, ens.).
- Bestaande geboue op die grondeenheid en op direk aangrensende grondeenhede.
- Alle bestaande dienste binne en rondom die aansoekgebied.
- Paduitleg op aangrensende grondeenhede.
  - Die voorgestelde onderverdeling(s).
- Voldoende afmetings om die onderverdelingsgroottes aan te dui.
- Die erwe agtereenvolgend genommer.
- Die naam van die persoon of firma wat die uitleg voorberei het. (As kontoere wat op die plan aangetoon word, deur 'n ander persoon of firma voorberei is, moet die betrokke naam ook verskyn.)
- Lo-koördinaatruitinterseksies tesame met ruitlynwaardes indien versoek word.
- Die voorgestelde name van strate.
- 'n Lys van die voorgestelde sonerings deur middel van onderskeie kleure onderskei (die kleurnotasie moet in ooreenstemming wees met die skemaregulasies), wat die verskillende gebruike, getal erwe vir elke gebruik, oppervlaktes per gebruik en oppervlaktes uitgedruk as 'n presentasie van die totale oppervlakte van die onderverdeling aantoon. Die oppervlakte moet in m^5 verstrek word.

Indien dit in uitsonderlike gevalle nodig is om van die vereistes genoem in paragraaf 4 af te wyk, moet sodanige afwyking gemotiveer word. Hierdie vereiste stel ook nie die aansoeker daarvan vry om enige bykomende inligting te verstrek wat die Plaaslike Owerheid vereis nie.

3. MOTIVERINGSVERSLAG

'n Volledige motivering van die wenslikheid van die voorgenome grondgebruiksverandering vir alle aansoeke moet aangeheg word. Die omvang van hierdie verslag sal verskil van aansoek tot aansoek, afhangende van die sensitiwiteit van die omgewing en die grootte van die beoogde ontwikkeling. Die volgende riglyne geld ten opsigte van sodanige motivering:

3.1 Wenslikheid

Die begrip "*wenslikheid*" in die konteks van grondgebruikbeplanning kan gedefinieer word as die mate van die aanvaarbaarheid van die voorgestelde wysiging op die betrokke grondeenheid. Bespreek die wenslikheid van die gebruiksverandering aan die hand van die volgende aspekte:

a) *Fisiese eienskappe van die eiendom:* Die verwagte invloed van die voorgestelde grondgebruiksverandering en enige modifikasie van die fisiese eienskappe moet bespreek word. Die fisiese eienskappe sluit in topografie (hellings), geologiese formasies, grondeienskappe en diepte van onderliggende rotsformasies, mikroklimaat, plantegroei (byvoorbeeld indringerplante), vloedvlaktes en vloedlyne, watertafels, fonteine, dreineringspatroon, unieke ekologiese habitats en sensitiewe gebiede, bestaande opgevulde gebiede en gruisgroewe, drapotensiaal van die gebied, ens.

b) *Bestaande beplanning van die gebied:* Bespreek hoe die beplande grondgebruiksverandering by bestaande beplanning ten opsigte van die gebied inpas aan die hand van gidsplanne, struktuurplanne, ens.

c) *Karakter van die omgewing:* Bespreek die versoenbaarheid van die voorgestelde grondgebruikverandering met die tipe grondgebruike in die omgewing, die woondigtheid (byvoorbeeld erfgroottes), historiese, argitektoniese of bewaringswaardige gebiede, natuurlike bates, hoeveelheid gemeenskapsfasiliteite, privaatheid van bure, straattonele, uitsig, ens.

d) *Die potensiaal van die eiendom:* Bespreek die potensiaal van die eiendom vir ander gebruike, byvoorbeeld Landbou (in 'n bestaande landbougebied), bewaring (van natuurlike en stedelike omgewings), mynbou (byvoorbeeld is daar enige ekonomiese ontginbare minerale op die eiendom?), ontspanning en hoe hierdie voorstel potensiaal beïnvloed.

e) *Die ligging en toeganklikheid van die eiendom:* Bespreek die toeganklikheid van die eiendom ten opsigte van bestaande stedelike ontwikkeling, die hoofpadnetwerk en ander infrastruktuur, asook die invloed van addisionele verkeer, indien enige, op die omgewing. In die geval van 'n hersonering tot onderverdelingsgebied moet die beskikbaarheid van grondeenhede met soortgelyke eienskappe en die verwagte tempo van ontwikkeling van sodanige eenhede ook bespreek word.

f) *Voorsiening van dienste:* Bespreek die moontlikheid van dienstevoorsiening (is daar enige probleme daarmee), watter tipe dienste voorsien sal word, wat die koste van die voorsiening sal wees en of dit wenslik is om die tipe dienste te voorsien (byvoorbeeld, wat die invloed daarvan op die natuurlike omgewing sal wees), moontlike besoedeling, ens.

g) *Die konstruksiefase van die voorstel:* Bespreek hoe lank die konstruksiefase sal duur, of enige tydelike strukture opgerig sal moet word (byvoorbeeld, werkerskampe), waar konstruksiemateriaal verkry sal word (byvoorbeeld, gruisgroewe op die perseel), of enige plat stoot van duine, enige uitgrawings, opvullings, verwydering van plantegroei, ens., beoog word en wat die omvang daarvan sal wees, waar konstruksiemateriale opgeberg sal word en of enige skade aan die natuurlike omgewing herstel sal word of nie (byvoorbeeld, deur terreinverfraaiing).

3.2 Vorm van die uitleg

Die vorm van die detailuitleg moet ook gemotiveer word aan die hand van die volgende aspekte:

a) *Inherente eienskappe van die terrein:* Bespreek hoe inherente fisiese eienskappe en mensgemaakte hoedanighede van die terrein hanteer word aan die hand van byvoorbeeld bestaande infrastruktuur, omliggende grondgebruike, beperkings soos geraas- en lugbesoedeling, hellings, ens.

b) *Voorsiening van gemeenskapsfasiliteite en oopruimtes:* Bespreek die hoeveelheid, grootte en plasing van sodanige fasiliteite, die bruikbaarheid van oopruimtes, hoe oopruimtes inpas by 'n bestaande of beplande oopruimte struktuur, hoeveel oopruimtes per 1000 persone voorsien gaan word, ens.

c) *Padinfrastruktuur:* Bespreek die hiërargie en breedte van paaie, die lanks- en dwarshellings, die inskakeling by bestaande padstruktuur, die invloed van die padnetwerk op ander infrastruktuur (byvoorbeeld, dreinering en riolering), die toeganklikheid van die onderskeie grondeenhede, asook die moontlike skeiding van voetganger- en motorverkeer.

d) *Plaaslike besighede en hoëdigtheidsbehuising:* Bespreek die grootte en plasing van persele, die voorgestelde sonerings daarvan, die invloed van hierdie voorgestelde sonerings op omliggende grondeenhede, verkeersvloei en oopruimtevoorsiening.

4. AFSKRIF VAN DIE TITELAKTE

>n Afsrif van die titelakte van elke afsonderlike gedeelte grond waarop die aansoek betrekking het, moet as bylaag tot die aansoek aangeheg word.

5. VERBANDHOUER SE TOESTEMMING

Enige aansoek om hersonering of onderverdeling van grond, waar sulke grond of >n gedeelte daarvan aan >n verband onderworpe is, moet >n toestemmingsbrief van die verbandhouer ook as bylaag bevat.

6. VOLMAG VIR AANSOEK

Indien die aansoek deur enige ander persoon of instansie as die geregistreerde eienaar van die grond voorberei en/of ingedien word, moet die aansoek vergesel word van >n volmag of maatskapy of BK resolusie vir die aansoek en moet die volmag die aard en omvang van die aansoek beskryf (voorbeeld aangeheg).

7. TOEPASLIKE EN VEREISTE ONDERSOEKE EN GOEDKEURINGS

Indien enige ander wetgewing of owerheid enige ondersoeke of ander aksies (soos byvoorbeeld die vereistes t.o.v. omgewingsimpakstudies) vereis, moet alle bewyse van die voldoening aan sulke vereistes, die aansoek vergesel.

8. ADDISIONELE INLIGTING

Die Raad is by magte om enige addisionele inligting, bykomend tot bogenoemde inligting, van die aansoeker te vereis indien die Raad van mening is dat dit nodig mag wees vir die oorweging van die aansoek.

C Prosedures

1. INDIENING VAN AANSOEK

a) Die aansoek moet **in duplikaat**, tesame met al die vereiste aanhangsels, by die plaaslike munisipaliteit ingedien word.
b) Indien daar met geen instansies vooraf in aanraking gekom is nie, moet addisionele afskrifte van die aansoek en alle kaarte en dokumente, op versoek, voorsien word.
c) Tydens die indiening van enige aansoek, moet die toepaslike aansoekgelde vir die betrokke aansoek(e) aan die Raad betaal word. Die aansoekgelde word jaarliks deur die Raad bepaal en word binne die Raad se Tariewelys vervat.

2. VOORAF SKAKELING MET ANDER INSTANSIES

a) Waar 'n ontwikkelaar bewys kan lewer dat 'n instansie tevrede is met 'n plan of voorstel deur byvoorbeeld 'n endossement op 'n plan of brief van die instansie te toon, sal sodanige instansie nie noodwendig weer om kommentaar genader word nie. Voorafskakeling met belanghebbende instansies word sterk aangemoedig en aansoeke sal op dié manier bespoedig word.
b) Dit is wenslik dat aansoekers in 'n vroeë stadium die kwessie van die installering van dienste ook met die plaaslike owerheid bespreek.

3. ADVERTERING EN KENNISGEWING

Advertering en kennisgewing word in detail in die volgende afdeling van hierdie Handleiding behandel.

4. VERDERE PROSESSERING VAN AANSOEKE

a) Na ontvangs van enige aansoek en voorgeskrewe aansoekgelde, sal die Raad die betrokke aansoek (bykomend tot advertering en kennisgewing soos hieronder beskryf) ook vir insette en kommentaar verwys na enige instansie wat na hul mening >n belang daarby het of enige insette kan lewer.
b) Na ontvangs van alle besware, insette en kommentaar, sal die Raad die betrokke skrywes aan die aansoeker voorsien vir sy/haar insette en kommentaar op die skrywes. Enige skakeling tussen die aansoeker en beswaarmakers wat kan lei tot die uitklaring van misverstande en derhalwe die terugtrekking van besware word aangemoedig. Indien die aansoeker nie binne 90 dae reageer op die betrokke besware / insette nie, word die aansoek geag te verval het. (Art 4.2 van Bylaag A tot die Wet)
c) Geen besware wat neerkom op bloot >n poging om handelskompetisie uit te skakel, sal deur die Raad in ag geneem word nie. (Art 64.1(c) van die Wet)
d) Die betrokke aansoek, tesame met alle insette, besware en kommentare word dan aan die Raad voorgelê vir oorweging. In gevalle waar die betrokke aansoek slegs deur die LUR oorweeg kan word, (sien punt 7. van hierdie afdeling) sal die Raad hul aanbeveling / inset saam met die aansoek en al bogenoemde dokumente aan die LUR voorlê vir oorweging.

5. VOORWAARDES EN BEPERKINGS

Waar die Raad (of LUR) enige aansoek goedkeur, mag die Raad / LUR enige voorwaardes vir goedkeuring van die aansoek vereis met die doel om te verseker dat die bedoeling van die aansoek soos goedgekeur , verwesenlik word of om enige bepaalde beswaar aan te spreek. (Art. 65 van die Wet)

6. REG TOT APPÉL

Enige aansoeker, beswaarmaker of persoon/instansie wat tydens bogenoemde proses >n inset gelewer het, het die reg om teen die Raad / LUR se besluit te appeleer indien hy/sy van mening is dat hy/sy deur die besluit benadeel word (Art. 74 van die Wet).

Sodanige appél moet binne 21 dae na ontvangs van die kennisgewing van die besluit ingedien word. >n Afskrif van die appél moet, vir kennisname, ook aan die Raad gestuur word.

7. AANSOEK WAT NA DIE LUR VIR GOEDKEURING VERWYS MOET WORD

Die onderstaande aansoeke mag nie deur die Raad oorweeg word nie en sal die Raad, by ontvangs van sulke aansoeke, die aansoek prosesseer, oorweeg en >n aanbeveling aan die LUR maak:

a) enige aansoek wat >n uitwerking sal hê op die bevoegtheid van enige provinsiale of nasionale regeringsvlak.
b) enige aansoek wat in finansiële invloed kan hê op enige provinsiale of nasionale departement.
c) enige aansoek wat strydig mag wees met enige provinsiale of nasionale ontwikkelingsplanne.

8. HER-AANSOEKE

Indien enige aansoek deur die Raad en/of Appéltribunaal geweier is, mag sodanige aansoeker, of enige daaropvolgende eienaar van die betrokke grond, nie weer binne >n tydperk van 5 jaar vir dieselfde of soortgelyke gebruiksverandering >n aansoek indien nie.

9. GELYKTYDIGE OORWEGING VAN AANSOEKE

Wanneer 'n aansoek verskeie goedkeurings ingevolge hierdie of verskillende wetgewing vereis en twee of meer van die aansoeke geadverteer moet word, moet die aansoeker die Verantwoordelike Beampte daarop wys, sodat al sodanige aansoeke gelyktydig geadverteer en vir goedkeuring voorgelê kan word.

D Advertering

1. Die primêre doel van advertering en kennisgewing is om alle grondeienaars wat enige belang by die betrokke aansoek het of deur die goedkeuring daarvan geraak mag word, van die aansoek in kennis te stel.
2. Adverteer beteken om kennisgewing van die voorgenome aksie van gebruiksverandering te beteken aan elke grondeienaar en/of okkupeerder wat na die mening van die Verantwoordelike Beampte >n belang by die aangeleentheid het. (Art 77.2 van die Wet)
3. Aansoekers sal van alle nodige voorbeelde van die kennisgewing en naamlyste voorsien word om dit vir die aansoeker moontlik te maak om die advertering en kennisgewingsproses self en op eie koste af te handel indien dit nie deur die Raad op die aansoeker se koste gedoen word nie.
4. In die advertensie moet vermeld word dat enigeen of enige persoon wat beswaar het teen die voorgestelde verandering, sodanige beswaar binne een-en-twintig (21) dae na die datum van die advertensie skriftelik by die Raad kan indien en daarin moet voorts vermeld word waar die aansoek en planne, indien daar is, ter insae lê. (Art 77.1 van die Wet)

5. Die Raad moet afskrifte van enige besware wat binne die tydperk in die advertensie vermeld, ontvang word, vir die aansoeker gee vir sy kommentaar.
6. Die aansoeker sal, na afhandeling van die adverteringsproses, die Raad van alle bewyse van kennisgewings en advertensies voorsien.

7. Aangesien die implikasies en impak van aansoek tot aansoek sal verskil, sal die omvang en metodes van advertering noodwendig ook nie altyd dieselfde wees nie. Onderstaande tabel toon die minimum vereistes van advertering vir elke afsonderlike aansoek. **Die Raad behou egter die reg voor om addisionele advertering van enige aansoek te vereis.**

Aard van aansoek	Kennis-gewing in plaaslike koerant	Kennis-gewing slegs aan aanlig-gende bure	Kennis-gewing aan bure en ander belang-hebbendes	Vertoon >n kennis-gewing op die betrokke perseel	Hou van >n publieke vergade-ring
Vergunningsgebruik: Renbaan	verplig		verplig	verplig	opsioneel
Vergunningsgebruik: tweede woonhuis			verplig	verplig	
Vergunningsgebruik: Ander	verplig		verplig	verplig	
Afwyking van beplanningsbeheer		verplig		verplig	
Wysiging van voorwaardes		verplig		verplig	
Beroepsbeoefening		verplig			
Verlenging van 2 jaar van goedkeuring	Slegs indien en soos deur die Raad verlang				
Tydelike afwyking	verplig		verplig	verplig	
Onderverdeling van >n woonperseel		verplig		verplig	
Hersonering binne en in lyn met gebiede van voorkeur			verplig	verplig	
Hersonering vanaf Landbousones na enige ander sone	verplig		verplig	verplig	
Hersonering of onderverdeling onder die 1:50 jaar vloedlyn	verplig		verplig	verplig	verplig
Hersonering na Sakesone I of enige Nywerheidsone buite gebiede van voorkeur	verplig		verplig	verplig	verplig
Hersonering na Spesiale sone	Soos deur die Raad bepaal				
Onderverdelings beskryf in Afdeling J		verplig		verplig	
Onderverdelings beskryf in Afdeling K		verplig		verplig	
Alle ander onderverdelings	verplig		verplig	verplig	
Opheffing van titelbeperkings (na inwerkingtreding)		verplig		verplig	
Ander aansoeke nie hierbo vermeld nie	Soos deur die Raad bepaal				

E Tydskale

Die volgende minimum en/of maksimum tydskale is van toepassing op die verskillende aksies tydens die prosessering en oorweging van enige aansoek (Alle tydskale word bepaal deur 7 dae toe te laat vir posaflewering na datum vir posbewysstrokies, waarna die tydskaal in werking tree):

Raad se versoek vir addisionele inligting	binne 2 weke na ontvangs van die aansoek
Advertering en kennisgewings	binne 3 weke na ontvangs van aansoek of addisionele inligting
Tydperk vir besware en/of insette	21 dae
Tydperk vir enige departement om insette te lewer	60 dae
Aansoeker se reaksie op besware en insette	90 dae
Voorlegging van die aansoek vir besluitneming	binne 60 dae van ontvangs van alle insette en reaksie op besware en insette
Kennisgewing aan aansoeker en beswaarmakers van besluit	binne 7 dae van besluit
Indiening van >n appél teen >n besluit	binne 21 dae van kennis van besluit
Kennis oor datum en plek van verhoor	binne 7 dae van ontvangs van appél
Verhoor deur die Appéltribunaal	binne 60 dae van ontvangs van appél
Kennis van Appéltribunaal se besluit	binne 7 dae van besluitneming
Verval van >n goedkeuring indien die regte nie benut word nie	2 jaar

F Verval van Gebruiksregte

Enige regte wat volgens >n goedkeuring deur die Wet of hierdie Regulasies tot >n gedeelte grond toegevoeg word, verval na twee jaar (of enige ander tydperk wat deur ander wetgewing bepaal mag word en hierdie Wet vervang of oorskry) tensy die eienaar gedemonstreer het dat hy/sy die grond ooreenkomstig die aansoek ontwikkel of benut het (insluitend die registrasie van minstens een erf vir onderverdelings). Die betrokke eienaar mag wel aansoek doen vir die verlenging van die goedkeuringstydperk (Art 45 van die Wet).

G Algemene Beginsels en Beleid

Die Raad sal die volgende beginsels as grondslag neem vir die oorweging van enige aansoek:

1. Die nasionale beginsels van volhoubaarheid, gelykheid, doeltreffendheid, integrasie en goeie bestuur.
2. Noord-kaapse Wet op Ontwikkeling en Beplanning - beginsels van Hoofstuk 1.
3. Die versoenbaarheid van die aansoek met die bepalings van die GOP, Ruimtelike Ontwikkelingsraamwerk en enige ander goedgekeurde oorhoofse beplanningsdokument- of plan van die Raad.
4. Die Raad se voorgeskrewe prosedure en adverteringsvereistes moet streng nagekom word.

5. Versoenbaarheid van die aansoek met die Raad se Ruimtelike Riglyne soos in hierdie Handleiding of enige ander beleidsdokument vervat.
6. Enige beleid van die Raad soos vervat in die Raad se Beleidsregister.

H Ruimtelike Riglyne

Bykomend tot bogenoemde beleidsaspekte en beginsels, moet enige ontwikkeling gemeet word aan die ruimtelike aspekte wat geïdentifiseer is in die Ruimtelike Ontwikkelings Raamwerk van die Munisipaliteit of enige ander ruimtelike planne van die Raad. Die riglyne wat in bogenoemde Raamwerk of planne geïdentifiseer is, sal die basis vorm gedurende die oorweging van enige aansoek.

I Gebiede van voorkeur hersonerings (minimum advertensie prosedure)

Die Raad sal voorkeur gee aan en die aansoekers sal die minimum vereiste prosedures mag volg ten opsigte van enige aansoek wat uitvoering gee aan spesifieke bepalings van die Raad oor gebied van voorkeur vir sekere gebruike (soos in die soneringskaarte aangedui), naamlik:

1. Uitbreiding van die Sentrale Sakekern van enige dorp, in ooreenstemming met die Raad se Ruimtelike Ontwikkelingsraamwerk of enige ander goedgekeurde beplanningsdokument.
2. Uitbreiding van enige bestaande nywerheidsgebied.
3. Behuising soos vervat in die Raad se Ruimtelike Ontwikkelingsraamwerk.

J Vrygestelde Onderverdelings

Die volgende onderverdelings is tot die publiek se voordeel of van so >n aard dat dit nie enige redelike naasliggende eienaar of okkupeerder kan affekteer nie en word derhalwe vrygestel van die adverteringsvereistes van >n aansoek. Slegs >n voltooide aansoekvorm en liggingsplan sal by die Raad ingedien moet word:

1. Die onderverdeling van grond vir die bou of verandering van paaie of enige ander saak wat daarmee in verband staan;
2. Die onderverdeling van grond ten einde die oordrag daarvan aan >n plaaslike owerheid, semi-staatsinstelling of ander statutêre liggaam te bewerkstellig, met uitsondering van grondeenhede wat weens ontwikkeling vervreem word;
3. Die onderverdeling van grond waar die Staat >n opmeting kan vereis, ongeag of die Staat die grondeienaar is of nie;
4. Die onderverdeling van grond waar opmetings vir >n onteiening ingevolge die Onteieningswet, 1975 (Wet nr. 63 van 1975) vereis word;
5. Die onderverdeling van grond ten einde uitvoering aan >n hofbeslissing te gee; en
6. Die opmeet van grond om die registrasie van >n serwituut- of huurgebied op die naam van >n plaaslike owerheid, die staat, >n semi-staatsinstelling of ander statutêre liggaam te bewerkstellig.

K Onderverdelings onderhewig aan die minimum advertensie prosedure

Die volgende onderverdelings is ook tot die publiek se voordeel of van so >n aard dat dit nie enige redelike naasliggende eienaar of okkupeerder kan affekteer nie en hoef derhalwe slegs aan die minimum adverterings- en aansoekvereistes te voldoen:

1. Onderverdeling wat die opmeting van strate en/of openbare oop ruimtes wat gesluit is noodsaak, ten einde dit met die aangrensende erf of erwe te konsolideer;
2. Die onderverdeling van grond, ten einde die oordrag daarvan van >n plaaslike owerheid, semi-staatsinstelling of ander statutêre liggaam te bewerkstellig, met uitsondering van grondeenhede wat weens ontwikkeling vervreem word;

3. Die onderverdeling van grond in bestaande behuisingskemas ten einde privaat eiendomsbesit moontlik te maak; en

4. Die onderverdeling van grond om wysiging van die gemeenskaplike grens tussen twee of meer grondeenhede moontlik te maak.

Tydens die indiening van hierdie aansoeke, sal die volgende dokumentasie voldoende wees, tensy die Raad addisionele inligting verlang:

a) >n Liggingsplan, wat die perseel relatief tot die omliggende gebied toon;
b) >n Afskrif van die titelakte(s) en opmetingsdiagram(me) van die grond;
c) >n Afskrif van enige serwituutakte betreffende die grond;
d) >n Afskrif van die verbandhouer se toestemming, indien van toepassing; en
e) Die eienaar se toestemming en/of volmag, indien van toepassing.

SIYATHEMBA MUNISIPALITEIT

Aansoek vir grondgebruikverandering kragtens die Noord-Kaapse Wet op Ontwikkeling en Beplanning, 1998 (Wet 7 van 1998)

Erf/plaas nommer	
Eiendomsbeskrywing	
Fisiese adres	
Geregistreerde eienaar(s)	
Aansoeker	

AANSOEK OM:

(Merk asseblief die toepaslike blokkie met 'n kruisie)

Die **Hersonering** van grond vanaf een sone na >n ander	
>n **Afwyking** vanaf die grondgebruikbeperkings voorgeskryf in die regulasies van >n toepaslike soneringskema	
>n **Vergunningsgebruik** soos bepaal in die Raad se soneringskema	
Die **beoefening van >n beroep** vanaf >n woonperseel	
>n **Tydelike afwyking** om toe te laat dat >n gebou of grond vir >n tydperk van hoogstens 5 jaar gebruik word vir >n doel waarvoor daar nie >n spesifieke sone voorsiening gemaak is nie	
Die **Onderverdeling** van grond	
Die opheffing, opskorting of wysiging van **Titelaktebeperking(s)** (Nog nie ingevolge Wet 7 van 1998 nie)	
Die opheffing, opskorting of wysiging van **enige voorwaardes** gestel aan >n aansoek	
Die **verlenging van die 2 jaar van goedkeuring** van >n aansoek	
Enige **Ander** aansoek ingevolge die Wet of regulasies.	

Die Munisipale Bestuurder
Siyathemba Munisipaliteit

Posbus 16
Prieska 8940

Geagte Heer / Dame

AANSOEK VIR GRONDGEBRUIKVERANDERING KRAGTENS DIE NOORD-KAAPSE WET OP ONTWIKKELING EN BEPLANNING, 1998 (WET 7 VAN 1998)

(HIERDIE VORM MOET DEUR DIE AANSOEKER/VERTEENWOORDIGER INGEVUL WORD)
(Merk asseblief die toepaslike blokkie met 'n kruisie waar van toepassing)

1. PERSOONLIKE BESONDERHEDE VAN AANSOEKER

1.1 Naam van persoon/firma aan wie die korrespondensie gerig moet word: .....

1.2 Adres: .....

.....

.....

.....

1.3 Telefoon nommer: .....

1.4 Faks nommer : .....

1.5 Sel nommer: .....

2. PERSOONLIKE BESONDERHEDE VAN DIE GEREGISTREERDE EIENAAR VAN DIE GROND

2.1 Naam van geregistreerde eienaar: .....

2.2 Adres: .....

.....

.....

.....

2.3 Telefoon nommer: .....

2.4 Faks nommer : .....

2.5 Sel nommer: .....

Indien die aansoeker nie die geregistreerde eienaar(s) van die grondeenheid is nie, heg >n volmag van die geregistreerde eienaar(s) of maatskapy of BK resolusie by die aansoek aan. Dit geld ook indien die persoon wat aansoek doen, nog besig is om die grondeenheid te verkry en indien die grondeenheid deur >n maatskappy of meer as een persoon besit word.

3. ALGEMENE INLIGTING AANGAANDE DIE GRONDEENHEID

3.1	Erf/plaas nommer:	.....
3.2	Fisiese adres van grondeenheid:	.....
3.3	Uitbreiding nommer:	.....
3.4	Geregistreerde beskrywing ingevolge titelbewys(e):	.....
3.5	Nommer en datum van Titelbewys(e):	.....
3.6	Oppervlakte van grondeenheid:	.....
3.7	Wat is die huidige sonering van die grondeenheid?	.....
3.8	Is die grondeenheid ontwikkel (geboue, ens.)?	Ja: Nee:
	Indien wel, wat is die aard en toestand van die ontwikkelings/verbeterings?	....
3.9	Word die huidige sonering van die grond benut?	Ja: Nee:
	Indien nie, wat is die aanwending (gebruik) van die grond?	....
3.10	Word die eiendom deur 'n verband beswaar?	Ja: Nee:
	Indien wel, heg die verbandhouer se toestemming by die aansoek aan.	
3.11	Is >n vorige aansoek om onderverdeling/ hersonering/vergunningsgebruik/ afwyking van die eiendom oorweeg?	Ja: Nee:
	Indien wel, wanneer en verstrek besonderhede, insluitend alle owerheids-verwysingsnommers en besluite:	....

4. BESONDERHEDE VAN AANSOEK

4.1 Beskryf die voorgenome ontwikkeling kortliks (noem ook die sonering, vergunning of afwyking wat verlang word):

.....

.....

.....

.....

.....

.....

.....

.....

4.2 Het die voorstel betrekking op die hele grondeenheid? | Ja: | Nee:

Indien nie, meld die grootte van daardie gedeelte van die grondeenheid wat nie betrokke is nie, asook waarvoor dit gebruik gaan word: .....

.....

4.3 Watter reëlings sal getref word met betrekking tot die volgende dienste vir die erf/erwe? (Volle besonderhede moet verstrek word, veral in gevalle waar dit nie moontlik is om by bestaande plaaslike owerheidsdienste aan te sluit nie).

a) Watertoevoer

.....

.....

b) Dreinering en wegdoen van stormwater

.....

.....

c) Wegdoen van nagvuil, vuilwater en rioolwater

.....

.....

d) Wegdoen van vullis

.....

.....

e) Elektrisiteit

.....

.....

5. BEPERKENDE VOORWAARDES

5.1 Is daar enige beperkings, soos serwitute, regte, verbande, ens. ten opsigte van die grondeenheid ingevolge die transportakte wat >n invloed kan hê op hierdie aansoek, wat opgehef moet word? | Ja: | Nee:

Indien wel, vermeld volledige besonderhede:

.....

.....

.....

5.2 Is enige gedeelte van die grondeenheid in >n vloedvlakte van >n rivier onder die 1:50 jaarvloedlyn geleë of onderhewig aan enige oorstromings? | Ja: | Nee:

Indien wel, verstrek besonderhede:

.....

.....

.....

5.3 Is daar enige fisiese beperkings (bv. steil hellings, onstabiele grondformasies, moerasse, ens.) wat die beoogde ontwikkeling kan beïnvloed?

Ja:	Nee:

Indien wel, verstrek volle besonderhede en meld hoe die probleem opgelos gaan word:

.....

.....

.....

5.4 Is daar enige ander goedkeuring vir die implementering van die beoogde ontwikkeling nodig, wat buite hierdie Wet val?

Ja:	Nee:

Indien wel, lys die goedkeurings:

.....

.....

.....

6. DIE VOLGENDE DOKUMENTE WORD INGEDIEN TER STAWING VAN DIE AANSOEK

BESONDERHEDE VAN DOKUMENT		**JA**	**NEE**	**NVT**
6.1	>n ***Liggingskaart t.o.v. die dorp of streek***			
6.2	>n ***Plaaslike liggingsplan*** wat die perseel relatief tot die omliggende persele toon;			
6.3	>n Plan wat die ***sonering*** van die omliggende gebied toon;			
6.4	>n Plan wat die ***werklike en bestaande gebruike*** wat die perseel omring, toon;			
6.5	>n ***Uitlegplan***;			
6.6	>n Afskrif van die ***Titelakte(s) en Opmetingsdiagramme*** van die grond;			
6.7	>n Afskrif van enige ***serwituutakte*** betreffende die grond;			
6.8	>n Afskrif van die ***verbandhouer se toestemming***, indien van toepassing;			
6.9	>n Afskrif van enige sertifikate van ***mineraalregte*** en sedering daarvan, tesame met die ***mineraalreghouer se toestemming***, indien van toepassing;			

BESONDERHEDE VAN DOKUMENT		JA	NEE	NVT
6.10	Die eienaar se toestemming en/of ***volmag***, indien van toepassing;			
6.11	Dokumentasie betreffende die verwagte voorsiening van ***gemeenskapsfasiliteite*** en die verantwoordelikhede van openbare owerhede in hierdie verband;			
6.12	Dokumentasie betreffende die verwagte voorsiening van ***ingenieurs- of paddienste*** en verantwoordelikhede van openbare owerhede in hierdie verband;			
6.13	Dokumentasie betreffende enige prosesse van ***openbare betrokkenheid*** wat geïnisieer is met betrekking tot hierdie aansoek en enige maatskaplike ooreenkomste, indien van toepassing;			
6.14	Indien die aansoeker >n maatskappy, beslote korporasie of ander regsentiteit, behalwe >n natuurlike persoon is, is >n afskrif van >n ***geldige magtigende besluit*** aangeheg;			
6.15	>n ***Vloedlynsertifikaat*** wat aandui of die grond of enige gedeelte daarvan aan >n 1:50 jaarvloedlyn onderworpe is, al dan nie;			
6.16	>n ***Verkeersimpakevaluering***, gegrond op die kapasiteit van die omliggende padnetwerk om enige bykomende eise te hanteer wat as gevolg van die ontwikkeling ontstaan, indien vereis word;			
6.17	>n ***Omgewingsimpakevaluering*** gegrond op die potensiële impak wat die voorgestelde aansoek sal hê ten opsigte van die konteks van die omliggende omgewing;			
6.18	>n ***Geotegniese verslag***;			
6.19	>n Bewys wat aantoon in watter mate die aansoek voldoen aan die ***beginsels in hoofstuk I*** van hierdie Wet;			
6.20	>n Staat wat aantoon in watter mate die aansoek voldoen aan enige ***goedgekeurde ontwikkelings- en beplanningsraamwerk in hoofstuk*** I van hierdie Wet bedoel;			
6.21	>n Volledige ***motiveringsverslag*** (sien uiteensetting in voorafgaande voorskrifte);			

Ek die ondergetekende, sertifiseer dat al die inligting wat in hierdie aansoekvorm verskyn, asook die inligting in die aanhangsels, korrek en volledig is en dat die aansoek verstaan word.

VOLLE NAME: .....

HANDTEKENING:

.....
.....
.....
.....
.....
.....

DATUM: .....

DATUM WAAROP DIE AANSOEK BY
DIE PLAASLIKE OWERHEID INGEDIEN IS: .....

VOLMAG/PROKURASIE

Ek, die ondergetekende, ...
(VOLLE VOORNAME EN VAN, IDENTITEITSNOMMER)

nomineer, konstitueer en stel hiermee aan .....

(VOLLE VOORNAME EN VAN VAN VERTEENWOORDIGER, IDENTITEITSNOMMER/BK OF MAATSKAPPY REGISTRASIENOMMER)

met mag van substitusie om my wettige agent te wees in my naam, plek en stede om namens my alle aspekte te hanteer van die aansoek(e) om

.....

ten opsigte van .....
(BESKRYWING VAN EIENDOM)

en in die algemeen, ten einde voorgenoemde doeleindes uit te voer, te doen of te laat doen al wat nodig is, net so volmaak en doeltreffend asof ek self teenwoordig was en hierin gehandel het, en so bekragtig alles wat my genoemde agent uit krag hiervan wettiglik doen of laat doen.

GETEKEN te ..... op hierdie ..... dag van ..... 20.....
(NAAM VAN DORP) (DAG, MAAND en JAARTAL),

in teenwoordigheid van die ondergetekende getuies.

.....
HANDTEKENING VAN EIENAAR

.....
GETUIE 1

.....
GETUIE 2

LAND USE CONTROL POLICY

MANUAL AND APPLICATION PROCEDURE IN TERMS OF LAND USE CONTROL FOR THE SIYATHEMBA MUNICIPAL AREA

The purpose of this document is to assist Council, officials and members of the public with submitting, processing and finalising of any application, in terms of land use control within the Municipal management area of Siyathemba.

This manual consists of the following sections:

A	General
B	Format of Applications
C	Procedures
D	Advertising
E	Time frames
F	Lapse of use rights
G	General principles and policy
H	Spatial guidelines
I	Areas with preferential rezoning
J	Exempted subdivisions
K	Subdivisions subject to the minimum advertising procedure

A General

1. This manual intends to support applications regarding Council=s land use control and management and should be read with Council=s Regulations, especially the General Section (Part 4) and ADefinitions@ of the Regulations.

2. Applicants are advised to provide as much as possible information, as sketchy information leads to delays.

3. All correspondence with reference to any application will be conducted in the language used for completion of the application form (preferably in English as it is the language Council meetings are conducted in), unless applicants request otherwise.

4. When an application requires several approvals in terms of various legislation and two or more of the applications must be advertised, the applicant shall point this out to the Municipal Manager, for him/her to be able to advertise all such applications and submit them for approval simultaneously.

5. Applicants= attention is asked specifically for the following requirements and provisions:
   a. **Incorrect and incomplete applications shall be sent back immediately** as such applications cause delays and impair applicants who compile thorough applications.

b. Applicants must personally be involved with their applications and must see to it that their own staff or parties that act on their behalf, do not delay the process unnecessarily.

c. Applicants must note that, up until the time that an application has been approved in writing, any correspondence or deliberations held in terms of this application, can not be regarded as an indication that approval will be given and the Local Government or Administration are not bound in any way.

d. No application may be prepared or submitted by a Council official on behalf of another person or party.

e. The Local Government reserves the right to annul any approval, based on incorrect information of an applicant. Applicants should therefore ensure that all information in terms of restrictive aspects that may influence the application, is provided .

6. Applicants are advised to discuss their applications and procedures beforehand with the appropriate Council official.

7. It is pointed out to applicants that the most appropriate and restrictive zoning that shall be applicable to the proposed use/development of the site, will be considered by Council / the MEC and that applications should be submitted as such.

8. The definitions as in Council=s Scheme Regulations, are also applicable to this Manual.

B Format of Applications

1. APPLICATION FORM

Council=s approved application form is attached to this Manual. The accurate and complete filling in of this application form is a prerequisite for any application submitted to Council. Additional to this application form and supporting the application, the following shall form part of any application, unless Council has, in writing, indicated differently:

2. PLANS AND MAPS

The following plans and maps shall accompany the application, together with the information referred to below:

2.1 Site map in terms of the town or region

The application shall be accompanied by a clearly readable A3 or A4 sized copy of the 1:50000 topo-cadastral maps or any similar map of the town or region, where the following detail is indicated:

- true north, key and heading ARegional location@;
- the approximate location of the land unit involved in the application, relative to the remainder of the town or region; and
- any other applicable particulars.

2.2 Local Site Map

All applications must furthermore be accompanied by a site map on paper size A4 or A3 and preferably on a scale of 1:5000 (or if it is impossible, to a scale of roughly the same size). If an orthophotograph is available, a copy thereof may serve as site map. The map shall indicate the following detail:

- The scale, true north, key and heading ALocal Site Map@.
- Erf boundaries, including neighbouring erf or farm numbers.
- Size and location of the particular portion.
- Street names and location of existing buildings on the particular land unit and on directly adjacent land units.

- Roads, indicated whether they are main roads, highways, national roads or provincial roads.
- Local boundaries and other authority boundaries, etc.
- Any physical restrictions on the land unit or neighbouring land units that might influence the application.
- Any other relevant information.

2.3 Zoning map

All rezoning and/or subdivision applications shall be accompanied with one copy of an extract of Council=s zoning map, indicating the following detail:

- The scale, true north, key and heading AZoning Map@.
- All land units and existing zonings thereof within a radius of 300m from the outside boundary of the application area, as well as all undeveloped land units.

2.4 Land use map

Where the existing land uses differ from the relative zonings of the application area, or if Council requests it, the application shall also be accompanied by a map that indicates the existing uses of all land on the map.

2.5 Layout plan

All applications for subdivision, rezoning to subdivided areas and all applications where the detail of the application is important for approval of the application (e.g. rezoning for hypermarkets, holiday resorts, group housing, industrial subdivisions, etc.) shall be accompanied by a layout plan on one of the international paper sizes A0 to A4 (preferably as small as possible) on one of the following scales; 1:5000; 1:1000; 1:2500, indicating the following:

- The scale, true north, key and heading A*Layout plan*@, as well as the number of the plan (amendments of the plan shall have consecutive numbers).
- Contours with 1m or 2m height differences up to outside of the Layout boundary.
- All areas steeper than 1:4.
- 1:50 annual flood-line, if applicable.
- Other physical restrictions that might influence the layout (e.g. cliffs, marshes, dunes, etc.).
- Existing buildings on the land unit and on directly adjacent land units.
- All existing services within and surrounding the application area.
- Road layout on adjacent land units.
- The proposed subdivision(s).
- Sufficient measurements to indicate the sizes of the subdivisions.
- The erven numbered consecutively.
- The name of the person or firm that prepared the layout. (If contours, indicated on the plan, were prepared by another person or firm, the particular name should also be mentioned).
- Lo-coordinates together with grid references if requested.
- The proposed streets names.
- A list of the proposed zonings distinguished by means of different colours (the colour code shall be in accordance with the scheme regulations), indicating the different uses, amount of erven for each use, surfaces per use and surfaces expressed as a percentage of the total area of the subdivision. The surface area shall be expressed in m5.

If necessary, in extreme cases, to deviate from requirements mentioned in paragraph 4, such a deviation will have to be motivated. This requirement also does not exempt the applicant from providing any additional information as required by the Local Authority.

3. MOTIVATIONAL REPORT

A comprehensive motivation for all applications, regarding the desirability of the intended land use amendment, shall be attached. The extent of this report will differ from application to application,

depending on the sensitivity of the environment and the size of the intended development. The following guidelines apply regarding such motivation:

3.1 Desirability

The concept Adesirability@ in the context of land use planning, can be defined as the degree of acceptability of the proposed amendment for the particular land unit. Discuss the desirability of the use amendment in view of the following aspects:

a) *Physical characteristics of the property:* The expected influence of the proposed land use amendment and any modification of the physical characteristics shall be discussed. The physical characteristics include topography (inclines), geological formations, soil characteristics and depth of underlying rock-formations, microclimate, vegetation (e.g. invasive plants), flood plains and flood-lines, water tables, springs, drainage pattern, unique ecological habitats and sensitive areas, existing filled areas and gravel quarries, carrying potential of the area, etc.

b) *Existing planning of the area:* Discuss how the intended land use amendment complies with existing planning regarding the area e.g. structure plans, etc.

c) *Character of the environment:* Discuss the reconcilability of the proposed land use amendment with the land uses typical for the area, the residential density (e.g. size of erven), historical and architectural areas or areas worth conserving, natural assets, amount of community facilities, privacy of neighbours, street scenes, view, etc.

d) *The potential of the property:* Discuss the potential of the property for other uses, e.g. agriculture (in an existing agricultural area), conservation (of natural and urban environments), mining (e.g., are there any economically exploitable minerals on the property?), recreation and how this proposal influences potential.

e) *The location and accessibility of the property:* Discuss the accessibility of the property in view of existing urban development, the main road network and other infrastructure, as well as the influence of additional traffic on the environment, if any. In the case of a rezoning to subdivided area, the availability of land units with similar characteristics and the expected tempo of development of such areas shall also be discussed.

f) *Provision of services:* Discuss the possibility of service provision (are there any problems therewith), what type of services wil be rendered, what the cost of the provision will be and whether it is desirable to provide this type of services (e.g. what the influence thereof will be on the natural environment), possible pollution, etc.

g) *The construction phase of the proposal:* Discuss how long the construction phase will last, whether any temporary structures will have to be erected (e.g. camps for workers), where construction material will be collected (e.g. gravel quarries on the site), or if any levelling of dunes, excavations, fillings, removal of vegetation, etc. is contemplated and what the degree thereof will be, where construction materials will be stored and whether any damage to the natural environment will be repaired or not (e.g. by site beautification).

3.2 Format of the layout

The format of the detail layout shall also be motivated in view of the following aspects:

a) *Intrinsic characteristics of the site:* Discuss how intrinsic physical characteristics and manmade capacity are handled in view of for instance existing infrastructure, surrounding land uses, restrictions such as noise and air pollution, inclines, etc. of the site

b) *Provision of community facilities and open spaces:* Discuss the amount, size and location of such facilities, the usefulness of open spaces, how open space fit in with an existing or intended open space structure, how many open spaces will be provided per 1000 persons, etc.

c) *Road infrastructure:* Discuss the hierarchy and width of roads, the length and cross inclines, the inclusion with existing road structure, the influence of the road network on other infrastructure (e.g. drainage and sewerage), the accessibility of the various land units, as well as the possible separation of pedestrian and vehicle traffic.

d) *Local businesses and high density housing:* Discuss the size and location of sites, the proposed zonings thereof, the influence of these proposed zonings on neighbouring land units, flow of traffic and provision of open spaces.

4. COPY OF THE TITLE DEED

A copy of the title deed of each individual portion of land, applicable to the application, shall be attached to the application, as an annexure.

5. BONDHOLDER=S CONSENT

Any application for rezoning or subdivision of land, where such land or a portion thereof is subject to a bond, the bondholder=s letter of consent shall be included as an annexure.

6. POWER OF ATTORNEY FOR APPLICATION

If the application is prepared and/or submitted by any other person or party than the registered owner of the land, the application shall be accompanied by a power of attorney or company or CC resolution for the application and the power of attorney shall describe the nature and extent of the application (see attached example).

7. APPLICABLE AND PRESCRIBED SURVEYS AND APPROVALS

Should any other legislation or authority require any other actions (such as the requirements in respect of the environmental impact assessments) proof of compliance to such prerequisites must be attached to the application.

8. ADDITIONAL INFORMATION

Council has the power to demand any additional information, supplementary to above-mentioned information, from the applicant if Council is of the opinion that it might be necessary for the consideration of the application.

C Procedures

1. SUBMITTING OF APPLICATION

a) The application shall be submitted, **in duplicate**, to the local municipality, together with all the required annexures.

b) Additional copies of the application and all maps and documents shall be supplied on demand, if no party has been contacted beforehand.

c) With the submission of any application, the relevant application fees for the relevant application(s) shall be paid to Council. The application fees are determined annually by Council and contained in Council=s list of tariffs.

2. PRIOR LIAISON WITH OTHER PARTIES

a) Where a developer can prove that a party is content with a plan or proposal, by for example indicating an endorsement on a plan or letter of the party, such party will not necessarily be asked for comment again. Prior liaison with concerned parties is encouraged strongly as applications will be accelerated in this way.

b) It is desirable for applicants to also discuss with the local authority, at an early stage, the issue of installing of services.

3. ADVERTISING AND NOTIFICATION

Advertising and notification are dealt with in detail in the following section of this Manual.

4. FURTHER PROCESSING OF APPLICATIONS

a) After receiving any application and prescribed application fees, Council will refer the relevant application (additional to advertising and notification as described hereunder), also for input and comment, to any party who, according to its opinion, has an interest or can make an input.

b) After all objections, input and comment are received, Council will provide the relevant correspondence to the applicant for his/her input and comment regarding the correspondence. Any liaison between the applicant and objectors, that might result in the resolving of misunderstandings and subsequent rescinding of objections, is encouraged. If the applicant does not respond within 90 days regarding the objections/inputs, the application will be regarded as having lapsed. (Sect. 4.2 of Annexure A to the Act).

c) Council will consider no objections that boil down to purely an attempt to eliminate commercial competition. (Sect. 64.1(c) of the Act).

d) The particular application, together with all inputs, objections and comments will then be brought before Council for consideration. In cases where the relevant application can only be considered by the relevant MEC, (see point 7 of this section), Council will submit its recommendation/input, together with the application and all above-mentioned documents, to the MEC for consideration.

5. PROVISIONS AND RESTRICTIONS

Where Council (or the MEC) approves any application, Council / MEC may demand any provisions for approval of the application, with the purpose to ensure that the intention of the application as approved, is adhered to or to address any particular objection. (Sect. 65 of the Act).

6. RIGHT TO APPEAL

Any applicant, objector or person/party that made an input during above-mentioned process, has the right to appeal against Council/the MEC=s decision if he/she feels that he/she is wronged by the decision (Sect.74 of the Act).

Such an appeal shall be submitted within 21 days after notification of the decision is received. A copy of the appeal must also be sent to Council.

7. APPLICATIONS THAT NEED TO BE REFERRED TO THE MEC FOR APPROVAL

The following applications may not be considered by Council, and Council will, when such applications are received, process and consider the application and make a recommendation to the MEC:

a) any application that will have an effect on the powers of any provincial or national government level.
b) any application that might have a financial influence on any provincial or national department.
c) any application that might be conflicting with any provincial or national development plans.

8. RE-APPLICATIONS

If any application is denied by Council and/or the Appeal Tribunal, such applicant or any successive owner of the particular land, may not submit an application for the same or similar use amendment within a period of five years.

9. SIMULTANEOUS CONSIDERATION OF APPLICATIONS

When an application demands various approvals in terms of this or other legislation, and two ore more of the applications must be advertised, the applicant has to indicate this to the Municipal Manager, to ensure the simultaneous advertising and submittance for approval of all such applications.

D Advertising

1. The primary purpose of advertising and notification is to inform all land owners, who have any interest in the particular application or may be affected by the approval of the relevant application, of the application.

2. Advertising means to serve notice of the intended action of use amendment to each land owner and/or occupant who, according to the opinion of the Municipal Manager, has a concern with the matter. (Sect. 77.2 of the Act)

3. Applicants will be supplied with all the necessary examples of the notice and name lists so as to enable the applicant to personally complete the advertising and notification process at his/her own expense if it is not done by Council, for the account of the applicant.

4. In the advertisement it shall be mentioned that anybody or any person objecting to the proposed amendment, shall lodge such objection in writing within twenty-one (21) days from the date of the advertisement with Council, and it must furthermore state where the application and plans, if there are any, lie open to inspection. (Sect. 77.1 of the Act)

5. Council will give copies of any objections, received within the period as indicated in the advertisement, to the applicant, for comment.

6. The applicant will supply Council with all proof of notices and advertisements, after completion of the advertising process.

7. As the implications and impact will vary from application to application, the extent and methods of advertising will necessarily also not always be identical. The following table shows the minimum requirements for advertising for each individual application. **Council however reserves the right to demand additional advertising of any application.**

Nature of application	Notice in local newspaper	Notice only to adjacent neighbours	Notice to neighbours and other concerned parties	Display a notice on the relevant site	Public meeting to be held
Consent use: Racecourse	compulsory		compulsory	compulsory	optional
Consent use: Second dwelling			compulsory	compulsory	
Consent use: Other	compulsory		compulsory	compulsory	
Departure from planning control		compulsory		compulsory	
Amendment of provisions		compulsory		compulsory	

Occupational practice		compulsory			
Extension of approval of 2 years	Only if and as required by Council				
Temporary departure	compulsory		compulsory	compulsory	
Subdivision of a residential site		compulsory		compulsory	
Rezoning within and in line with areas of preference			compulsory	compulsory	
Rezoning from Agricultural zones to any other zone	compulsory		compulsory	compulsory	
Rezoning or subdivision beneath any 1:50 year flood line	compulsory		compulsory	compulsory	compulsory
Rezoning to Business zone 1 or any Industrial zone outside areas of preference	compulsory		compulsory	compulsory	compulsory
Rezoning to Special zone	As determined by Council				
Subdivisions described in Section J		compulsory		compulsory	
Subdivisions described in Section K		compulsory		compulsory	
All other subdivisions	compulsory		compulsory	compulsory	
Annulment of title restrictions (after commencement)		compulsory		compulsory	
Other applications not mentioned above	As determined by Council				

E Time frames

The following minimum and/or maximum time frames are applicable to the various actions during processing and consideration of any application (All time frames are determined by allowing seven days for postal delivery after date of postal slips, where-after the time frame becomes operational):

Council=s request for additional information	Within two weeks of receipt of the application
Advertising and notices	Within three weeks of receipt of application or additional information
Period for objections and/or inputs	21 days
Period for any department to make inputs	60 days
Applicant=s reaction to objections and inputs	90 days
Presentation of the application for decision-making	Within 60 days of receipt of all inputs and reaction to objections and inputs
Notice of decision to applicant and objectors	Within seven days of decision
Submitting an appeal against a decision	Within 21 days of notice of decision

Knowledge regarding date and place of trial	Within seven days of receipt of appeal
Trial by the Appeal Tribunal	Within 60 days of receipt of appeal
Knowledge of Appeal Tribunal=s decision	Within seven days of decision-making
Expiring of approval if rights are not used	Two years

F Lapse of use rights

Any rights, added to a portion of land, according to an approval by the Act or these Regulations, lapse after two years (or any other period that may be determined by other legislation and replaces or exceeds this Act), unless the owner has demonstrated that he/she has developed or used the land according to the application (including the registration of at least one erf for subdivisions). The relevant owner may apply for the extension of the approval period. (Sect. 45 of the Act)

G General Principles and policy

Council will use the following principles as basis for the consideration of any application:

1. The national principles of sustainability, equality, efficiency, integration and sound management.
2. The Northern Cape Act on Development and Planning B principles of Chapter 1.
3. The reconcilability of the application with the definitions of the IDP, Spatial Development Framework and any other approved planning document or plan of Council.
4. Council=s prescribed procedure and advertising requirements shall strictly be adhered to.
5. Reconcilability of the application with Council=s Spatial Guidelines as included in this Manual or any policy document.
6. Any policy of Council as included in Council=s Policy Register.

H Spatial guidelines

In addition to above-mentioned policy aspects and principles, any development will be measured against spatial aspects identified within the Spatial Development Framework of the Municipality or any other spatial plans of the Council. The guidelines identified in the above-mentioned Framework or plans will form the basis during the consideration of any application.

I Areas with preferential rezoning (minimum advertising procedure)

Council will give preference to, and the applicants will be allowed to follow the minimum required procedures with regard to any application implementing specific provisions of Council, regarding area of preference for certain uses (as indicated in the zoning maps), namely:

1. Expanding of the central business district of any town, in accordance with Council=s Spatial Development framework or any other approved planning document.
2. Expanding of any existing industrial area.
3. Housing as included in Council=s Spatial Development framework.
4. Applications for consent uses.

J Exempted subdivisions

The following subdivisions are to the advantage of the public, or of such a nature that it cannot influence any fairly adjacent owner or occupant and is therefore exempted from the advertising requirements of an application. Only a completed application form and location plan will have to be submitted to Council:

1. The subdivision of land for the building or changing of roads or any other matter in regard therewith;

2. The subdivision of land to bring about the transfer thereof to a local authority, para-statal or other statuary body;
3. The subdivision of land where the State may require a survey, irrespective whether the State is the land owner or not;
4. The subdivision of land where surveys are demanded for an expropriation according to the Act on Expropriation, 1975 (Act 63 of 1975);
5. The subdivision of land, adhering to a court order; and
6. The surveying of land to implement the registration of a servitude or lease area in the name of a local authority, the state, a para-statal or other statuary body.

K Subdivisions subject to the minimum advertising procedure

The following subdivisions are also to the public=s advantage or of such a nature that it cannot affect any adjacent owner or occupant and therefore only has to comply with the minimum advertising and application requirements.

1. Subdivision, necessitating the survey of streets and/or locked-up public open spaces, enabling it to consolidate with the adjoining erf or erven;
2. The subdivision of land, to facilitate its transfer to a local authority, para-statal or other statuary body, with the exception of land units, expropriated for development;
3. The subdivision of land in existing housing schemes in order to make private ownership possible; and
4. The subdivision of land in order to make the amending of the communal boundaries between two or more land units possible.

At the submitting of these applications, the following documentation will be sufficient, unless Council requires additional information:

a) A site plan, showing the site in relation to the surrounding area;
b) A copy of the title deed(s) and survey diagram(s) of the land;
c) A copy of any servitude deed regarding the land;
A copy of any bond(s) regarding the land, together with the bondholder=s consent, if applicable; and
The owner=s consent and/or power of attorney, if applicable.

SIYATHEMBA MUNICIPALITY

Application for land use amendments according to the Northern Cape Planning and Development Act, 1998 (Act 7 of 1998)

Erf/farm number	
Property description	
Physical address	
Registered owner(s)	
Applicant	

APPLICATION FOR:

(Please mark applicable block with a cross)

The **Rezoning** of land from one zone to another	
A **Departure** from the land use restrictions prescribed in the regulations of a relevant zoning scheme	
A **Consent use** as determined in Council=s zoning scheme	
The **practising of an occupation** from a residential site	
A **Temporary departure** to allow the use of a building or land for a period of at most five years, for a purpose for which no specific zone has been provided	
The **Subdivision** of land	
The annulment, suspension or amendment of **Title Deed restriction(s)** (Not yet in terms of Act 7 of 1998)	
The annulment, suspension or amendment of **any provisions** brought with an application	
The **extension of the two years of approval** of an application	
Any **other** application in terms of the Act on Regulations	

The Municipal Manager
Siyathemba Municipality
P O Box 16
Prieska
8940

Dear Sir/ Madam

APPLICATION FOR LAND USE AMENDMENT IN TERMS OF THE NORTHERN CAPE PLANNING AND DEVELOPMENT ACT, 1998 (ACT 7 OF 1998)

(THIS FORM HAS TO BE COMPLETED BY THE APPLICANT/REPRESENTATIVE)
(Please mark the relevant block with a cross where applicable)

1. PERSONAL PARTICULARS OF APPLICANT

1.1 Name of person/firm to whom the correspondence must be addressed: .....

1.2 Address:

.....

.....

.....

.....

1.3 Telephone number:

.....

1.4 Fax number:

.....

1.5 Cell number:

.....

2. PERSONAL PARTICULARS OF THE REGISTERED OWNER OF THE LAND

2.1 Name of registered owner:

.....

2.2 Address:

.....

.....

.....

.....

2.3 Telephone number:

.....

2.4 Fax number:

.....

2.5 Cell number:

.....

If the applicant is not the registered owner(s), attach a power of attorney of the registered owner(s) or company or CC resolution to the application. This also applies if the person applying, is still busy obtaining the land unit and if the land unit is owned by a company or more than one person.

3. GENERAL INFORMATION REGARDING THE LAND UNIT

3.1	Erf/farm number:	.....	
3.2	Physical address of land unit:	.....	
3.3	Extension number:	.....	
3.4	Registered description in terms of title deed(s):	.....	
3.5	Number and date of title deed(s):	.....	
3.6	Surface area of land unit:	.....	
3.7	What is the current zoning of the land unit?	.....	
3.8	Is the land unit developed (buildings, etc.)?	Yes:	No:
	If so, what is the nature and condition of the developments/improvements?	.....	
		.....	
3.9	Is the current zoning of the land utilised?	Yes:	No:
	If not, what is the application (use) of the land?	.....	
		.....	
3.10	Is the property burdened by a bond?	Yes:	No:
	If so, attach the bondholder=s consent to the application.		
3.11	Has an application for subdivision / rezoning / consent use / departure of the property, previously been considered?	Yes:	No:
	If so, when and provide particulars. Including all authority reference numbers and decisions:	.....	
		.....	

4. PARTICULARS OF APPLICATION

4.1 In short, describe the intended development (also state the required zoning, consent use or departure):

.....

.....

.....

.....

.....

.....

.....

.....

4.2 Does the proposal apply to the entire land unit? | Yes: | No:

If not, indicate the size of that portion of the land unit not concerned, as well as what it will be used for: .....

.....

4.3 What arrangements will be made regarding the following services for the site? (Full detail must be supplied, especially in cases where it is not possible to join up with existing local authority services).

a) Water supply

.....

.....

b) Drainage and disposal of storm water

.....

.....

c) Disposal of night-soil, waste-water and sewerage water

.....

.....

d) Disposal of refuse

.....

.....

e) Electricity

.....

.....

5. RESTRICTING PROVISIONS

5.1 Are there any restrictions, such as servitudes, rights, bonds, etc. with regard to the land unit in terms of the deed of transfer that should be lifted, as it might have an influence on this application? | Yes: | No:

If so, name full particulars:

.....

.....

.....

5.2	Is any portion of the land unit in a flood plain of a river beneath the 1:50 annual flood-line, or subject to any flooding?	Yes:	No:

If so, give full particulars:

.....

.....

.....

5.3	Are there any physical restrictions (e.g. steep inclines, unstable land formations, marshes, etc.) that might influence the intended development?	Yes:	No:

If so, give full particulars and state how the problem will be solved:

.....

.....

.....

5.4	Is any other approval, that falls outside of this Act, necessary for the implementing of the intended development?	Yes:	No:

If so, list the approvals

.....

.....

.....

6. THE FOLLOWING DOCUMENTS ARE SUBMITTED TO VALIDATE THE APPLICATION

Description of documents		**Yes**	**No**	**N/A**
6.1	A ***Site map in terms of the town or region;***			
6.2	A ***Local site map*** that shows the site in relation to the surrounding sites;			
6.3	A plan that shows the ***zoning*** of the surrounding area;			
6.4	A plan that shows the ***actual and existing uses*** that surround the site;			
6.5	A ***Layout plan;***			
6.6	A copy of the ***Title deed(s) and Survey diagrams*** of the land;			
6.7	A copy of any ***servitude deed*** regarding the land;			
6.8	A copy of the ***bondholder=s consent,*** if applicable;			

6.9	A copy of any certificates of ***mineral rights*** and ceding thereof, together with the ***mineral rights holder=s consent,*** if applicable;			
6.10	The owner=s consent and/or ***power of attorney,*** if applicable;			
6.11	Documentation regarding the expected provision of ***community facilities*** and the responsibilities of public authorities in this regard;			
6.12	Documentation regarding the expected provision of ***engineer=s or road services*** and responsibilities of public authorities in this regard;			
6.13	Documentation regarding any processes of ***public involvement*** initiated in connection with this application and any social agreement, if applicable;			
6.14	If the applicant is a company, closed corporation or other legal entity, other than a natural person, a copy of a ***binding empowering decision*** is attached;			
6.15	A ***Flood-line certificate*** indicating whether the land or any portion of the land is subject to a 1:50 annual flood-line, or not;			
6.16	A ***Traffic impact assessment*** based on the capacity of the surrounding road network to cope with any additional demands resulting from the development, if required;			
6.17	An ***Environmental impact assessment*** based on the potential impact that the proposed application will have with regard to the context of the surrounding environment;			
6.18	A ***Geo-technical report;***			
6.19	Evidence that shows to what extent the application complies with the ***principles in chapter 1*** of this Act;			
6.20	A statement that indicates to what extent the application complies to any ***approved development and planning framework in Chapter 1*** as meant in this Act;			
6.21	A comprehensive ***motivational report*** (see explanation in previous provisions).			

I, the undersigned, certify that all the information that appears in this application form, as well as the information in the annexures, are correct and complete and that the application is understood.

FULL NAME: .....

SIGNATURE: .....

DATE: .....

DATE ON WHICH THE APPLICATION IS
SUBMITTED TO THE LOCAL AUTHORITY: .....

POWER OF ATTORNEY/PROXY

I, the undersigned,.....

(FULL NAMES AND SURNAME, IDENTITY NUMBER)

nominate, constitute and appoint.....

(FULL NAMES AND SURNAME OF REPRESENTATIVE, IDENTITY NUMBER/CC OR COMPANY REGISTRATION NUMBER)

with power of substitution to be my legal agent in my name place and on my behalf to manage all

aspects of the application(s) for

.....

with regard to .....

(DESCRIPTION OF PROPERTY)

and in general, in order to execute, to do or to have done what is necessary for above-mentioned purposes, just as perfectly and effectively as if I myself was present and took part herein, and so endorse everything that my mentioned agent legally does or has done on the power of this.

SIGNED at ..... on this ..... day of ..... 20.....

(NAME OF TOWN) (DAY, MONTH AND YEAR),

in the presence of the undersigned witnesses.

....

SIGNATURE OF OWNER WITNESS 1

.....

WITNESS 2

EMPLOYMENT EQUITY PLAN

Under Construction; to be revieded by August 2010

1. EMPLOYER INFORMATION ; EEA 2

Name	:	Siyathemba Local Municipality
Registration Number	:	Not Applicable
SARS Registration No	:	7150705129
U.I.F. Registration Number	:	0961916
V.A.T. Registration Number	:	4200119123
Workman's Compensation	:	0826-006-1800
Nature of Activities	:	Municipal
Physical Address	:	Siyathemba Local Municipality Victoria Street PRIESKA Northern Cape Province Republic of South Africa
Postal Address	:	Siyathemba Local Municipality P.O.Box 16 PRIESKA 8940
Telephone Number	:	053 3535300
Fax Number	:	053 3531386

2. ORGAN OF STATE

Since Siyathemba Local Municipality is a Local governmental authority, it is an organ of the State.

3. COMPULSORY COMPLIANCE

Siyathemba Local Municipality is a designated employer in terms of the Employment Equity Act, and is complying on a compulsory basis with the Employment Equity Act.

4. POPULATION OF PRIESKA / SIYATHEMBA AREA

See Population Profile – Chapter 2/ pg 18 of the IDP

5. EMPLOYEE INFORMATION AND WORKPLACE PROFILE

1. TOTAL NUMBER OF EMPLOYEES EMPLOYED

2. Siyathemba Local Municipality currently employs 134 persons on a full time basis.

6. SUMMARY OF WORKPLACE

Total employed	:	135 = 100%
Total Males employed	:	116 = 87.22%
Total Females employed	:	17 = 12.78%
Total Blacks employed	:	35 = 26.32%
Total Coloureds employed	:	86 = 64.66%
Total Whites employed	:	12 = 9.02%

The demographical distribution of population groups and gender groups in the Siyathemba region is as follows:

Black Male	6.8 %
Coloured Male	3.6 %
White Male	5.2 %

Black Female	7.2 %
Colured Female	3.8 %
White Female	3.0 %

All Male	48.6 %
All Female	51.4 %

Indians and other groups are insignificantly represented and will not have any influence on this Employment Equity Plan.

If the current persons employed by Siyathemba Municipality is compared with the above demographical distribution, it is clear that especially females are severly underrepresented.

7. DATE OF WORKPLACE PROFILE

10 MARCH 2003

8. WORKFORCE PROFILE

Total Number Employees in all Occupational Catagories EEA 2

OccupationalCatogories	Male	Male	Male	Male	Female	Female	Female	Female	Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Legislators, snr. officials & managers	0	1	0	1	0	0	0	0	2
Professionals	0	0	0	1	0	0	0	0	1
Technicians and associate professionals	0	0	0	1	0	2	0	0	3
Clerks	4	6	0	1	2	5	0	2	20
Services & sales workers	1	0	0	0	0	1	0	0	2
Skilled agric. And fishery workers	0	0	0	0	0	0	0	0	0
Craft and related trades workers	5	10	0	3	0	0	0	1	19
Plant and machine operators and assembles	5	12	0	0	0	0	0	0	17
Elementary occupations	16	49	0	0	1	3	0	0	69
Total Permanent	31	78	0	7	3	11	0	3	133
Non permanent	0	0	0	0	0	0	0	0	0
Total	31	78	0	7	3	11	0	3	133

Total number of employees with disabilities in all occupational categories: EEA 2

Occupational Catogories	Male	Male	Male	Male	Female	Female	Female	Female	Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Legislators, snr. officials & managers	0	0	0	1	0	0	0	0	1
Professionals	0	0	0	0	0	0	0	0	0
Technicians and associate professionals	0	0	0	0	0	0	0	0	0
Service & sales workers	0	0	0	0	0	0	0	0	0
Skilled agri. And fishery workers	0	0	0	0	0	0	0	0	0
Craft and related trades workers	0	0	0	0	0	0	0	0	0
Plant and machine operators and assembles	0	0	0	0	0	0	0	0	0
Elementery occupations	2	1	0	0	0	0	0	0	3
Total Permanent	2	1	0	1	0	0	0	0	4
Non permanent	0	0	0	0	0	0	0	0	0
TOTAL	2	1	0	1	0	0	0	0	4

Total number of employees in all occupational levels: EEA 2

Occupational Levels	Male	Male	Male	Male	Female	Female	Female	Female	TOTAL
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top Management	0	1	0	0	0	0	0	0	1
Senior Management	0	0	3	0	0	0	0	0	3
Professionally qualified and experienced specialists and mid-management	1	5	0	4	0	2	0	2	14
Skilled technical and academically qualified workers, juniormanagement, supervisors,foremenand superintendents	13	24	0	0	2	6	0	1	46
Semi-skilled and discretionarydecision making	16	49	0	0	1	3	0	0	69
Unskilled and defined decision making	0	0	0	0	0	0	0	0	0
TOTAL PERMANENT	30	79	0	7	3	11	0	3	133
NON-PERMANENT	0	0	0	0	0	0	0	0	0
TOTAL	30	79	0	7	3	11	0	3	133

Total number of employees with disabilities in all occupational levels: EEA 2

Occupational Levels	Male	Male	Male	Male	Female	Female	Female	Female	Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top Management	0	0	0	0	0	0	0	0	0
Senior Management	0	0	0	1	0	0	0	0	1
Professionally qualified and experienced specialists and mid-management	0	0	0	0	0	0	0	0	0
Skilled technical and academically qualified workers, junior management, supervisors, and foremen and superintendents	0	0	0	0	0	0	0	0	0
Semi-skilled and discretionary decision making	2	1	0	0	0	0	0	0	3
Unskilled and defined decision making	0	0	0	0	0	0	0	0	0

TOTAL PERMANENT	0	0	0	0	0	0	0	0	4
NON-PERMANENT	0	0	0	0	0	0	0	0	0
TOTAL	2	1	0	1	0	0	0	0	4

9. WORKFORCE MOVEMENT

FROM 01 MARCH 2002 TO 28 FEBRUARY 2003

RECRUITMENT & APPOINTMENT

Occupational Levels	Male	Male	Male	Male	Female	Female	Female	Female	Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top Management	0	0	0	0	0	0	0	0	0
Senior Mangement	0	0	0	0	0	0	0	0	0
Professionally qualified and experienced specialists and mid-managers	0	1	0	0	0	0	0	0	1
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents2	2	2	0	0	0	2	0	0	6
Semi-skilled and discretionary decision making	2	1	0	0	1	1	0	0	5
Unskilled and defined decision making	0	0	0	0	0	0	0	0	0
TOTAL PERMANENT	4	4	0	0	1	3	0	0	12
NON-PERMANENT	0	0	0	0	0	0	0	0	0
TOTAL	4	4	0	0	1	3	0	0	12

10. PROMOTION

No promotion were made in any occupational levels in the period 01 March 2002 to 28 February 2003.

TERMINATION

Occupational Levels	Male	Male	Male	Male	Female	Female	Female	Female	Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Top Management	0	0	0	0	0	0	0	0	0
Senior Management	0	0	0	1	0	0	0	0	1
Professionally qualified and experienced specialists and mid-management	0	0	0	1	0	0	0	0	1
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	0	4	0	2	0	1	0	3	10
Semi-skilled and discretionary decision making	0	4	0	2	0	0	0	0	6
Unskilled and defined decision making	0	0	0	0	0	0	0	0	0
TOTAL PERMANENT	0	8	0	6	0	1	0	3	18
NON-PERMANENT	0	0	0	0	0	0	0	0	0
TOTAL	0	8	0	6	0	1	0	3	18

11. **DISCIPLINARY ACTION** (SHORT OF DISMISSAL) over the past 12 months.

	Male	Male	Male	Male	Female	Female	Female	Female	Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Disciplinary Action	6	18	0	0	3	2	0	0	29

12. SKILLS DEVELOPMENT

Total number of people who received training in each occupational category during twelve months preceding this report.

Occupational Categories	Male	Male	Male	Male	Female	Female	Female	Female	Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Legislators, snr.officials & managers	0	1	0	1	0	0	0	0	2
Professionals	0	0	0	0	0	0	0	0	0
Technicians and associate professionals	0	0	0	0	0	0	0	0	0
Clerks	2	4	0	2	2	3	0	3	16
Service & sales workers	0	0	0	0	0	0	0	0	0
Skilled agric.And fishery workers	0	0	0	0	0	0	0	0	0
Craft and related trades workers	0	0	0	0	0	0	0	0	0
Plant and machine operators and assemblers	0	0	0	0	0	0	0	0	0
Elementary occupations	0	0	0	0	0	0	0	0	0
TOTAL PERMANENT	2	5	0	3	2	3	0	3	18
NON-PERMANENT	0	0	0	0	0	0	0	0	0
TOTAL	2	5	0	3	2	3	0	3	18

13. QUALITATIVE ASSESSMENT

AWARENESS OF EMPLOYMENT EQUITY

Which awareness measures were implemented by our organisation :

MEASURES	YES	NO

Formal Written Communication		X
Policy Statement includes reference to employment equity	X	
Summary of the Act display	X	
Employment Equity Training		X
Diversity Management programs		X
Discrimination awareness programs		X
Other		X

No employees received equity / non- discrimination training during the past year.

14. CONSULTATION

The following stakeholders were involved in the consultation process prior to the development of our employment equity plan :

STAKEHOLDERS	YES	NO
Workplace Forum		X
Consultative Body or Forum	X	
Registered trade union (s)	X	
All Employees	X	

Siyathemba Municipality has an appointed Labour Forum where both trade unions (SAMWU and IMATU) are represented as well as appointed councilors. This Labour Forum also doubles as an Employment Equity Committee.

A meeting was held in Prieska on ,10 March 2003 at which the quantitative and qualitative assessment for this EE plan was discussed.

The following persons were present:

- Clr.L.Valacia (Mayor)
- Clr. l..C. Adams
- Clr.R.C.Adams
- Clr.G.Macdonald
- Me. A.Accom (IMATU representative)
- Mnr.J. Van Staden (SAMWU representative)
- Me. D.Faber (representing the Municipal Support Programme)
- Mr. L.S. Casaleggio (Friday Management Solutions, acting as facilitator)
- Mr. J.J.Badenhorst (Town Secretary)

It should be noted that Me. Faber , Mr. Casaleggio and Mr. Badenhorst did not have any voting powers during the said meeting.

The level of agreement reached in the formulative of the plan was total.
Stakeholders will be meeting with bi-annually to discuss and review the council's progress with it's employment equity plan.

15. **Analyses** (QUALITATIVE ASSESMENT)

With the aid of the trade union representatives, all employees completed a form similar to the one below. Employees were not asked to disclose their names on the forms so as to ensure that employees could answer the questions openly and honestly without fear of being victimized.

The following employment policies and practices were identified by employees as barriers to employment equity.

Categories	Yes	No	If yes, Specify
Recruitment procedures	X		Some persons applying for positions (internally as well as externally) do not know if their applications are considered and do not get any feedback. The selection criteria for positions are unknown who primarily evaluates applications.
Advertising positions	X		Posts are not advertised wide enough to ensure that the best candidates are recruited. Some employees are of the opinion that only residents of Prieska are employed. Where positions are advertised outside Prieska, it is only done for a short period before applications close. Positions should first be advertised internally before inviting external applications to apply. Council allegedly approved a recruitment policy, but does not comply with it.
Selection criteria	X		Some employees are of the opinion that an applicant's knowledge, qualification and experience should logically be considered when applying for a position, but it seems as if it is not always considered.
Appointments	X		In order to ensure that Siyathemba Municipality's employment numbers are representative of the local population, persons are employed over-hastily without ensuring that appointees were the best candidates for the position. This is not always a problem, but it creates a problem at higher post levels where a certain measure of knowledge and experience is required. Councilors, politicians and management ignore the municipality's recruitment policy. Some appointments are discussed in secret and are not transparent and accountable to all employees. All appointments have not been discussed and approved by the Labour Forum. Political considerations and connections play too big a part in appointments. The ANC's provincial and regional structures have too big a say in the appointment of officials. Departemental heads have not yet been appointed. Much more men than women are appointed. Persons with disabilities are not appointed. White persons are not appointed in the lower job levels and categories. Because persons are appointed in a position for which they are not qualified or experienced, it now happens that other employees have to help them with their work, whilst those incompetent and not promoted.Polotical considerations play too big a part and it directly discriminates persons earn the income for that position as if they did the work. Employees who are not active members of the

			ANC and its strategic partners are not employed against a person's constitutional right to a freedom of choice.
Job classification and grading		X	All posts and positions in South African municipalities are classed and graded according to a national classification and grading system. Individual municipalities therefore have no influence over job grading and classification.
Remuneration and benefits		X	Although some employees mentioned that the application of remuneration and benefits is not fair, no concrete example was given.
Terms and conditions of service	X		The conditions of service as applicable to municipal employees are not implemented. All employees are not properly informed of the conditions of service applicable to them.
Job assignments		X	
Work environment and facilities		X	Although some employees complained about the availability of facilities, no one indicated how this creates a barrier to employment equity.
Training and development	X		No skills Development Plan has been compiled. Lack of specific skills have not yet been odentified.
Performance appraisal and evaluation systems	X		No performance appraisal and evaluation system currently exists.
Promotions	X		Promotions are done irregularly and are not based on merit. Politics play a big role.
Transfers		X	
Demotions		X	
Succession and experience planning	X		No policy exists.
Disciplinary Measures	X		Although the disciplinary policy is sufficient, it is not consistently applied. Some employees get away with transgressions without being disciplined. Some employees having 'the right' connections such as family members who are councilors or who are employed in high positions are not disciplined of misconduct. Some employees are even of the opinion that no disciplinary policy exist

Dismissals		X	Only office workers are allowed to take coffe/tea breaks.
Corporate Culture	X		The Municipality does not provide any assistance and has no formal HIV/AIDS awareness or assistance program.
HIV / Aids education and prevention programs	X		No proper and recognised pre-employment tests ate used to test an applicant's personality or attitude to ensure that an applicant is suited for a post.
Pre - employment testing	X		No policy exists
Induction	X		
Retirement	X		
Medical Aid	X		

16. EMPLOYMENT EQUITY OFFICER

The Municipal Manager Mr. Bessies has been appointed as the Municipality's equity officer.

17. INTERNAL GRIEVANCE PROCEDURES FOR NON-COMPLIANCE WITH THIS PLAN

Whenever an employee is of the believe that the Municipality is not fulfilling its obligations in terms of this plan, the following procedure will apply:

1. A formal written complaint will be handed to the Municipal Manager (currently Mr. Bessies). The complaint will state the complainant's name and will mention the nature of the grievance. The complainant should also make suggestions as how to solve the problem;

2. The Municipal Manager will sign for receipt of the complaint and will discuss the complaint with the complainant to gather all necessary information regarding the complaint;

3. The Municipal Manager will discuss the complaint fully with the Labour Forum by not later than one month after he has received the complaint.

4. The course of action decided upon by the Labour Forum will be made known to the complainant in writing within three days after such meeting. The decision will also mention the reasons on which the decision is based.

5. If the complainant is not satisfied with the outcome of his grievance, the employee must refer the matter to the CCMA for conciliation / adjudication.

6. No employee will be victimized for lodging a grievance with the senior manager or at the CCMA.

Numerical goals: occupational categories

The table below indicates the numerical goals we have set for our current employment equity plan :

Occupational Categories	Male	Male	Male	Male	Female	Female	Female		Total
	African	Coloured	Indian	White	African	Coloured	Indian	White	
Legislators, snr. officials & managers	0	1	0	0	1	2	0	0	4
Professionals	0	0	0	1	0	0	0	0	1
Technicians and associate	1	1	0	0	0	1	0	0	3

professionals									
Clerks	2	7	0	1	2	8	0	1	21
Service and sales workers	1	0	0	0	0	1	0	0	2
Skilled agric. and fishery workers	0	0	0	0	0	0	0	0	19
Craft and related trades workers	2	6	0	1	2	7	0	1	23
Plant and machine operators and assemblers	3	6	0	2	3	7	0	2	83
Elementary occupations	6	30	0	4	6	32	0	5	156
TOTAL PERMANENT	15	51		9	14	58	0	9	0
Non – permanent	0	0	0	0	0	0	0	0	156
Total	15	51	0	9	14	58	0	9	

Although specific occupational categories were not identified in which persons with disabilities will appointed, our numeral goal is to have ten (10) persons with disabilities employed.

We wish to achieve the above numerical goals by the year 2010 / 2015.

Please Note:

The above numerical goals are based on the population figures cited at the beginning of this document. Should the said population information be wrong and more correct figures become available, the Employer shall adapt these numerical goals to reflect such new figures.

18. RESOURCES

The following resources have been allocated to the implementation of employment equity during the past year:

Allocation of Resources	Yes	No
Appointed a designated officer to manage the implementation	X	
Located a budget to support the implementation goals of employment equity		X
Time off for employment equity consultative committee to meet on a regular basis	X	
Other		X

19. MONITORING AND EVALUATION OF IMPLEMENTATION

We will monitor the progress on the implementation of our employment equity plan on a bi-annual basis.

20. INCOME DIFFERENTIAL STATEMENT: EEA 4

SECTION A: EMPLOYER DETAILS

ITEM	DATA
Employer	Siyathemba Local Municipality
Registration Number	Not Applicable
SARS Registration Number	7150705129
UIF Registration Number	0961916
Industry Sector	Local Government / Municipal
Contact Person	Mr. Bessies
Address	Siyathemba Local Municipality Victoria Street
Town / City	Prieska
Telephone Number	053 3535300
Fax Number	053 3531389
E-Mail Address	Psk.muni@prieska.co.za
Date of Submission	25 March 2003

SECTION B: INCOME DIFFERENTIALS BY OCCUPATIONAL CATEGORY

Occupational Categories	Income Levels
Legislators, senior officials and managers	1. R 17 330-00
	2. R 10 430-00
Professionals	1. R 10 430-00
	2. R 10 430-00
Technicians and associate professionals	1. R 7 930-00
	2. R 3 800-00
Clerks	1. R 7 734-00
	2. R 3 738-00
Service and sales workers	1. R 3 738-00
	2. R 3 385-00
Skilled agricultural and fishery workers	1. R N/A
	2. R N/A
Craft and related trades workers	1. R 7 930-00
	2. R 279-00
Plant and machine operators and assemblers	1. R 4 269-00
	2. R 2 856-00
Elementary occupations	1. R 2 521-00
	2. R 2 319-00

SECTION C: INCOME DIFFERENTIALS BY OCCUPATIONAL LEVEL

Occupational Categories	Income Levels
Top Management	1. R 17 330-00
	2. R 17 330-00
Senor Management	1. R 10 430-00
	2. R 10 430-00
Professionally qualified and experienced specialists and mid-management	1. R 7 390-00
	2. R 7 930-00
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	1. R 7 930-00
	2. R 279-00
Semi-skilled and discretionary decision making	1. R 2 521-00
	2. R 2 319-00
Unskilled and defined decision making	1. R N/A
	2. R N/A

SECTION D: TOTAL INCOME DIFFERENTIALS

	Income Levels
All occupations and levels	1. R 17 330-00
	2. R 279-00

FLEET MANAGEMENT PLAN / STRATEGY

JULY 2004 – JUNE 2009

DECEMBER 2004

Project Team

- **Siyathemba Municipality**

PO Box 16
Prieska
8940

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e-mail: danier@africon.co.za

Recommendations from STRATEGY

In order to ensure the sustainability of the Siyathemba Municipality's vehicle fleet, the following is recommended to the SIYATHEMBEA Municipal Council:
This plan be accepted as the roadmap for the future of the Vehicle and Plant Fleet of Siyathemba and that the following specific aspects be addressed:

a) Sufficient funds must be budgeted for the operation of the fleet. The operating budget must be increased from R 826 230, or 4,5% of the total budget to +-R 3,4 million or 16% of the total budget (or 23% of the replacement value of the fleet). The R3,4 million includes R 1,3 million that is allowed for depreciation.

The budgets for the respective posts for the fleet are be as follows:

WBS Code	Activity / Item	2005/06	2006/07	2007/08	2008/09	Total
1	Operational Budget	**R 1,455,390**	**R 1,455,390**	**R 1,455,390**	**R 1,455,390**	**R 5,821,560**
1.1	Fuel costs	R 1,228,085	R 1,228,085	R 1,228,085	R 1,228,085	
1.2	Tyre costs	R 169,157	R 169,157	R 169,157	R 169,157	
1.3	Licence costs	R 58,148	R 58,148	R 58,148	R 58,148	
2	Maintenance Budget	**R 639,628**	**R 639,628**	**R 639,628**	**R 639,628**	**R 2,558,512**
3	Depreciation	**R 1,297,610**	**R 1,297,610**	**R 1,297,610**	**R 1,297,610**	**R 5,190,440**
Recommended vehicle budget		R 3,392,628	R 3,392,628	R 3,392,628	R 3,392,628	**R 13,570,512**

b) Effective Operation and Maintenance systems and procedures be developed, implemented and maintained.

c) A management information system be developed and implemented to support the management and operations and maintenance of the fleet.

d) The organisational structure of Siyathemba be revised to allocate the specific activities required for the improvement of the fleet management to specific posts.

e) Emphasis should be placed on Human Resource development in support of improved O&M management systems.

f) A vehicle asset register should be developed, implemented and maintained.

g) Financial planning, analysis, budgeting, accounting and monitoring systems should be improved.

The vehicle fleet age of Siyathemba must be reduced by:

a) The development of a Vehicle **Replacement Policy**. It is recommended that an asset life of 14 years in the medium term and of 10 year in the long term be adopted. A computer model should also be introduced to determine the economic life of the vehicles and plant in a more accurate and analytical way.

b) A three phased approach to the **purchasing** of new vehicles be implemented.
   Phase 1: 2003/04 Financial year – Purchasing of 6 items to the value of R3,559 million
   Phase 2: 2004/05 Financial year – Purchasing of 7 items to the total value of R4,029 million
   Phase 3: 2005/06 to 2011/12 Financial years – Annual allocation of R520 000 for the purchasing of further new vehicles.

In conclusion, it can be mentioned that only a firm commitment by the Siyathemba Council to implement this plan will improve the effectiveness and sustainability of their vehicle and plant fleet. Without this commitment service delivery to its citizens will remain problematic.

Executive Summary

Siyathemba Municipality approached the Development Bank of South Africa to support them with the financing of new plant and vehicles in order to upgrade their fleet. The DBSA agreed to support the Municipality with a loan, but was concerned about the long term sustainability of the arrangement. The DBSA therefore made it a condition that a "Vehicle Fleet Operation, Maintenance and Replacement Strategy" for the next 5 years be developed and implemented. Tenders were called for and AFRICON was appointed on 16 January 2004 as support consultant. The strategy is considered as part of the Municipality's Institutional Plan of the Integrated Development Plan. The process followed was therefore aligned with the IDP process and included the following phases:

- Analysis
- Strategies
- Projects
- Integration (not part of this project)
- Approval

A Analysis

The findings of the **Analysis Phase** are mainly twofold:

VEHICLE AND PLANT FLEET

- On average the fleet is two to three times older than the GAMAP Guidelines.
- Only 13 of the 63 vehicles are in a good or fair condition.
- Vehicles and Plant are generally very old and therefore in an unreliable condition.

MANAGEMENT

Lack of effective management is the factor with the greatest negative impact on the fleet. This is particularly evident as there are no clearly defined objectives, no long term planning and no short term programming and insufficient budgeting for operations, maintenance and replacement. The following is evident in particular:

- There is a lack of operational and management systems and tools for programming, performance evaluation and control activities.
- There is a lack of information to guide the formulation of operation and maintenance.
- There is a lack of effective preventative maintenance procedures to minimise breakdowns and to prolong the operational life of the vehicles and equipment.

OTHER ELEMENTS THAT NEED ATTENTION

In order to implement a programme to improve the management of the fleet and to improve its reliability and cost-effectiveness, attention to the following aspects are of the utmost importance:

- Human resource development

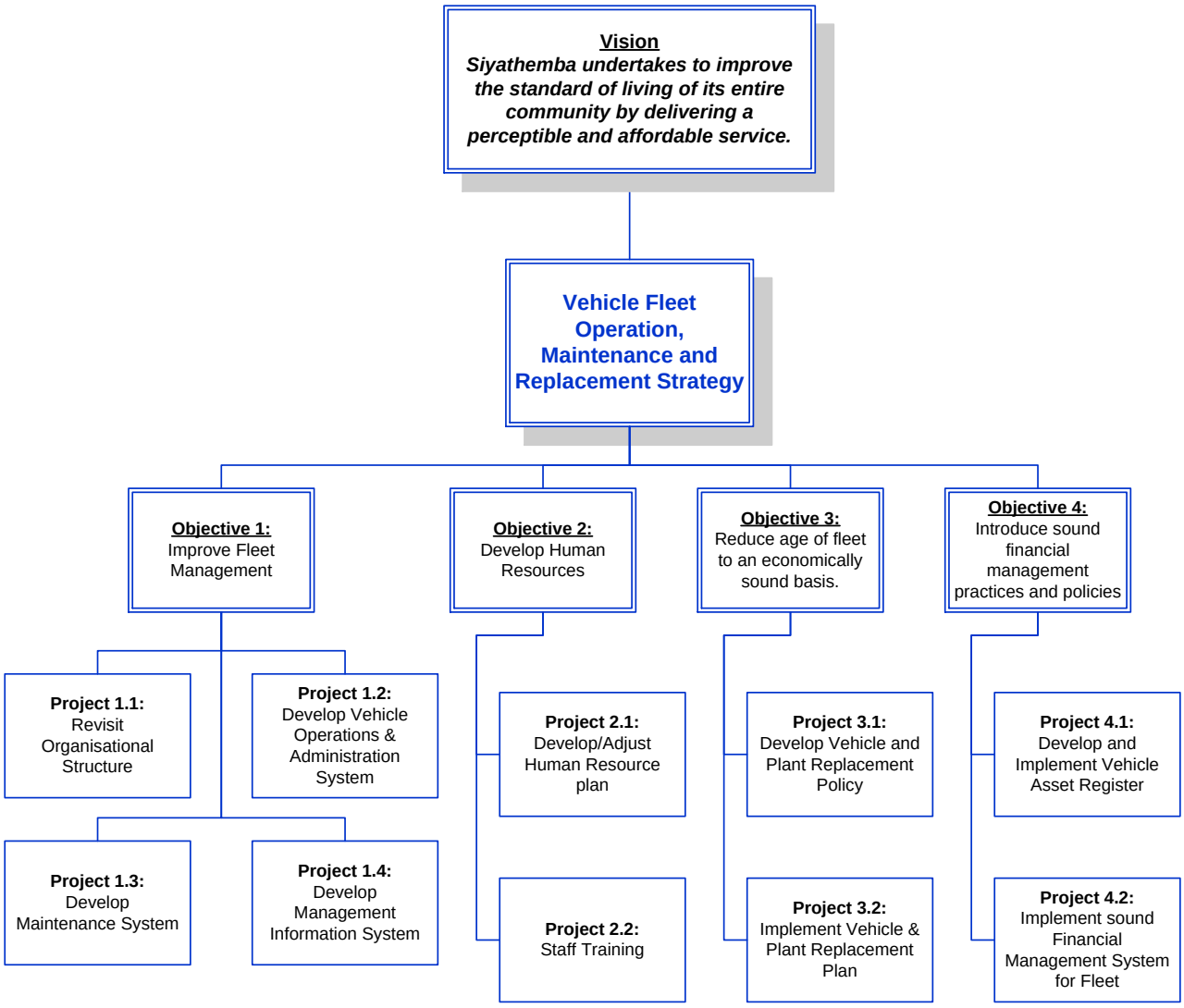
  Training of personnel in management skills, new systems and procedures as well as training of operators and drivers on operation and maintenance of vehicles and plant.

- Budgeting

  More funds will have to be made available to sponsor the above activities. The operating budget will have to be increased from R 826 230, or 4,5% of the total budget to +-R 3 400 000 or 16% of the total budget. The R 3 400 000 includes R 1 300 000 that is allowed for depreciation.

B Strategy Development

A **strategy** has been developed to address the shortfalls identified in the Analysis Phase. Diagrammatically the strategy looks as follows:



All the **objectives and projects** were carefully formulated and designed to support Siyathemba to manage, operate and maintain their vehicle and plant fleet in a sustainable manner.

OBJECTIVE 1: IMPROVE FLEET MANAGEMENT

This objective is aimed at improving the overall management of the fleet. The following projects were identified:

Project 1.1 – Revise Organisational structure

The purpose of this project is to identify all activities necessary to manage the vehicle fleet effectively and to allocate these activities to specific posts within the municipality. If necessary new posts will have to be created or existing ones revised.

Project 1.2 – Develop Vehicle Operations System

Currently there are no systems in place that can ensure that the vehicle fleet can be operated effectively. This project will be aimed at developing the necessary systems and the implementation thereof.

Project 1.3 – Develop Maintenance System

Maintenance of the fleet is currently not well structured with the result that plant and vehicles are in a bad state. This project is aimed at implementing a preventative maintenance system to reduce maintenance costs and to improve the effectiveness and reliability of the fleet. At the same time the corrective maintenance system should be investigated and systems implemented to improve efficiency and cost effectiveness.

Project 1.4 – Develop Management Information System

For the above three projects to be implemented successfully, a well structured management information system will be necessary. This system will support the above projects by:

- Capturing of data on an ongoing basis
- Storing the data in a database for future use
- Producing reports on a scheduled basis that will support monitoring of activities and help management to take informed decisions.

OBJECTIVE 2: DEVELOP HUMAN RESOURCES

Here two aspects will be addressed:

Project 2.1 –Human Resource Development Plan

This project is aimed at the development of the municipality's personnel in order to be able to support the proposed new management systems developed under Objective 1.

Project 2.2: Staff Training

This is an outflow from the Human Resource development plan and is aimed at training programmes that will develop the skills of the personnel in support of the proposed new management systems.

OBJECTIVE 3: REDUCE AGE OF FLEET

Here we have identified the following projects:

Project 3.1 – Develop Vehicle and Plant replacement Policy

Currently the municipality do not have firm policies in place for the replacement of the fleet. Through a systematic approach policies should be developed to address:

- Calculation of optimum time for replacement
- Procurement of new vehicles and plant
- Write-off and disposal of vehicles and plant

Project 3.2 – Implement Vehicle and Plant Replacement Plan

Under this project three phases have been identified to reduce the average asset life of the current fleet from 22 years to 10 years.

In phases 1 and 2 an amount of R7,588 million will be borrowed from the DBSA for the 2003/04 and 2004/05 financial years to purchase 13 items that have been identified through a detailed investigation. The fleet will also be reduced from 62 to 55 items.

Phase 3 will address the replacement of vehicles after the initial large investments of phases 1 and 2 and will require an annual average budget allocation of R513 000. It is envisaged that another 5 items will be replaced in the next three years from 2005/06 to 2007/08 financial years.

OBJECTIVE 4: INTRODUCE SOUND FINANCIAL MANAGEMENT PRACTICES AND POLICIES

Project 4.1 – Develop and Implement a Vehicle Asset Register

This is aimed at collecting and keeping critical information on every plant and vehicle item on record.

Project 4.2 – Implement Sound Financial Management Systems for Fleet

The municipality is currently not budgeting sufficient funds for the operation and maintenance of the fleet and the replacement of old vehicles.

Through a structured process of analysis, planning, budgeting, accounting and monitoring, the process of allocating and managing financial resources should be improved.

Currently the operating budget for the fleet is 4.5% of the total budget. This should be increased through the above process to approximately 16% or approximately R3.4 million. This includes an amount of R 1,3 million for depreciation.

The recommended respective budgets are as follows:

WBS Code	Activity / Item	2005/06	2006/07	2007/08	2008/09	Total
1	Operational Budget	**R 1,455,390**	**R 1,455,390**	**R 1,455,390**	**R 1,455,390**	**R 5,821,560**
1.1	Fuel costs	R 1,228,085	R 1,228,085	R 1,228,085	R 1,228,085	
1.2	Tyre costs	R 169,157	R 169,157	R 169,157	R 169,157	
1.3	Licence costs	R 58,148	R 58,148	R 58,148	R 58,148	
2	Maintenance Budget	**R 639,628**	**R 639,628**	**R 639,628**	**R 639,628**	**R 2,558,512**
3	Depreciation	**R 1,297,610**	**R 1,297,610**	**R 1,297,610**	**R 1,297,610**	**R 5,190,440**
Recommended vehicle budget		R 3,392,628	R 3,392,628	R 3,392,628	R 3,392,628	**R 13,570,512**

As from the 2005/06 financial year onwards, the municipality will have to budget at least R520 000 per annum for the replacement of vehicles to be able to achieve GAMAP Guidelines for the age of their fleet.

C Operational Strategies

5 Year Municipal Action Programme for Fleet

WBS Code	Project/Activity	Objective	Project Outputs	Major Activities	Responsibility	Total Cost	2004	2005	2006	2007	2008	20
1	Improve Fleet Management					R 220,000.00						
1.1	Amend functional Organisational Structure to Accomm odate Vehicle & Plant Management	To implement a functional organisational structure that will enable operation and maintenace to reach objectives and targetes, and will ensure proper functioning of vehicles and plant	Well managed of vehicle & plant fleet	Assesment of objectives and targets, reformulate organisational structure and implementation of revised structure	Municipal Manager	R 45,000.00						
1.2	Develop & Implement Vehicle & Plant Operations System	To operate the facilities, vehicles and plant in an effective way in order to deliver a quality service	Operation, control of operations, control of quality of service.	Issuing of vehicles & plant, operations thereoff, monitoring and control of operations	Technical Manager	R 65,000.00						
1.3	Develop & Implement Vehicle & Plant Maintenance System	Keep vehicles & plant in optimum performing condition & prolong operational life	Vehicles and plant in optimum working condition	Corrective & Preventative Maintenance	Technical Manager	R 40,000.00						
1.4	Developing a Management Information System for Vehicle and Plant O&M	To provide management at different centres of decision (strategic, tactical and operational) with the information needed to make decissions relating to operations and maintenancelevels	Accurate collection, measure, recording, storage and retrieval of data/information	Determine centres of decision, identify information required & KPi's, determine responsibility for collection and recording of data, formulate data structure, filing system structured and database designed, training and sheduling		R 70,000.00						
2	Human Resources					R 235,000.00						
2.1	Develop/Adjust Human Resource Development Plan	To improve services by the development of human resources	Adequate and skilled staffed for O&M of Fleet	This comprises all policies, standards and procedures which ensure that the municipality has the personnel it needs and that the personnel are appropriately trained	HR Manager	R 35,000.00						
2.2	Staff Training	To implement and continue a human resource development programme	Adequately trained staff	Conduct training programmes	HR Manager	R 200,000.00						
3	Reduce age of fleet					R 9,143,000.00						
3.1	Develop Vehicle and Plant Replacement Policy	To replace vehicles and plant in a consistant manner	Policy for Replacement of plant & vehicles	Determine Mechanisms for Calculation of Optimum Life of Fleet, Procurement, Write-off and Disposal		R 15,000.00						
3.2	Implement Vehicle & Plant Replacement Plan	Purchase new vehicles & plant to replace old ones & to support new and/or improve ineffective operations	New vehicles & plant purchased & old vehicles disposed of	Specifications, tenders, recommendations, orders & acceptance of vehicles & plant	Technical Manager / Finacial Manager	R 9,128,000.00						
3.2.1	Phase 1 - Purchases				Technical Manager / Finacial Manager	R 3,559,000.00						
3.2.2	Phase 2 - Purchases				Technical Manager / Finacial Manager	R 4,029,000.00						
3.2.3	Future Phases				Technical Manager / Finacial Manager	R 1,540,000.00						
4	Financial					R 35,000.00						
	Develop and Implement Vehicle Asset Register	To have accurate information on all plant and vehicles	Vehicle Asset Register	Gather/collect information and capture in database.		R 15,000.00						
4.1	Adjust financial system	Financial reports and indicators are availeble for the effective management and oprations of the vehicles and plant	Financial administration and accounting system aligned to support vehicle & plant management and operations	Results analysis, Planning, Budgeting, Accounting and Budget Monitoring	Financial manager	R 20,000.00						

In conclusion, it can be mentioned that only a firm commitment by the Siyathemba Council to implement this plan will improve the effectiveness and sustainability of their vehicle and plant fleet. Without this commitment service delivery to its citizens will remain problematic.

1 INTRODUCTION

Siyathemba Municipality approached the Development Bank of South Africa (DBSA) to support them with the upgrading of their vehicle and equipment fleet. The DBSA agreed to support the Municipality with a loan agreement but was concerned about the long-term sustainability of the arrangement.

The DBSA therefore made it a condition of the loan agreement that the Municipality should prepare and implement a "Vehicle management, maintenance and replacement plan". As the municipality do not have the internal capacity to prepare a plan of this nature, the DBSA and Siyathemba therefore agreed that an external service provider should be employed through an open tender process.

Tenders were called for on 9 December 2003 and closed on 16 January 2004.

Africon's tender was accepted and the Municipality appointed them on 4 March 2004.

It should be noted that the terms of reference was revised half way through the project. Initially the project scope was limited to the development of a replacement strategy and operations and maintenance of the vehicle and equipment fleet only.

At the meeting on 20 July 2004 where the first draft document was tabled, Africon was requested to extend the scope of the project also to include an assessment of all aspects that would impact on the sustainability of the vehicle and equipment fleet within the Municipality. It was also agreed that the plan should be considered as a "sector" plan of the Municipality's Integrated Development Plan (IDP).

Africon subsequently revised the layout of the document in order to be in line with the IDP Guide Pack as published by the Department of Provincial and Local Government.

2 PLANNING PROCESS

The Vehicle Fleet Operation, Maintenance and Replacement Strategy is considered as part of the institutional plan of the Municipality. ***The purpose of the institutional plan is to ensure that the Municipality's development of strategies and projects take existing capacities and constraints into consideration and they address institutional problems in the Municipality.***
The strategic planning process recommended for the compilation of an IDP was therefore also adopted for the development of the Vehicle Fleet Operations, Maintenance and Replacement Strategy and is made up of the following phases:

- Analysis
- Strategies
- Projects
- Integration
- Approval

2.1 INSTITUTIONAL ARRANGEMENTS / ROLES AND RESPONSIBILITIES

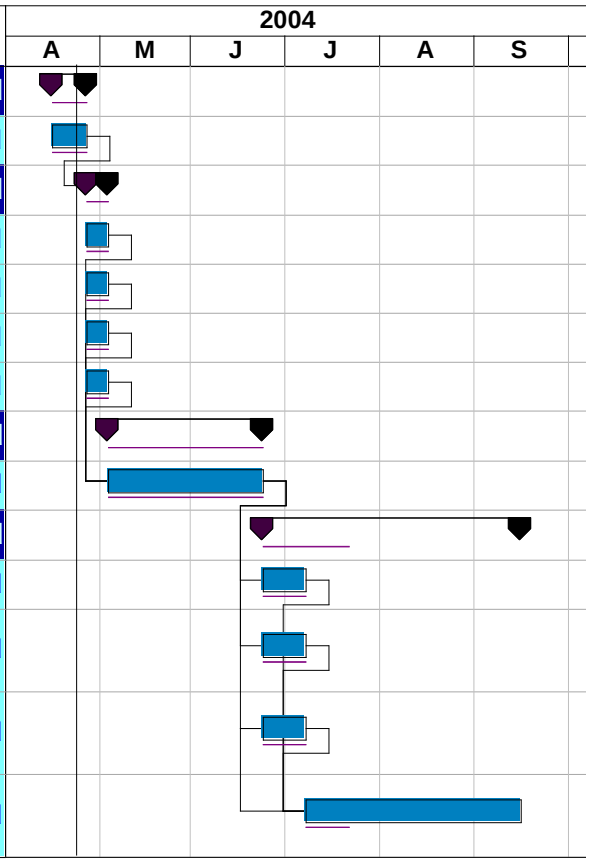
The distribution of roles and responsibilities regarding the vehicle management, replacement and maintenance strategy within Siyathemba Municipality is summarised in the following table:

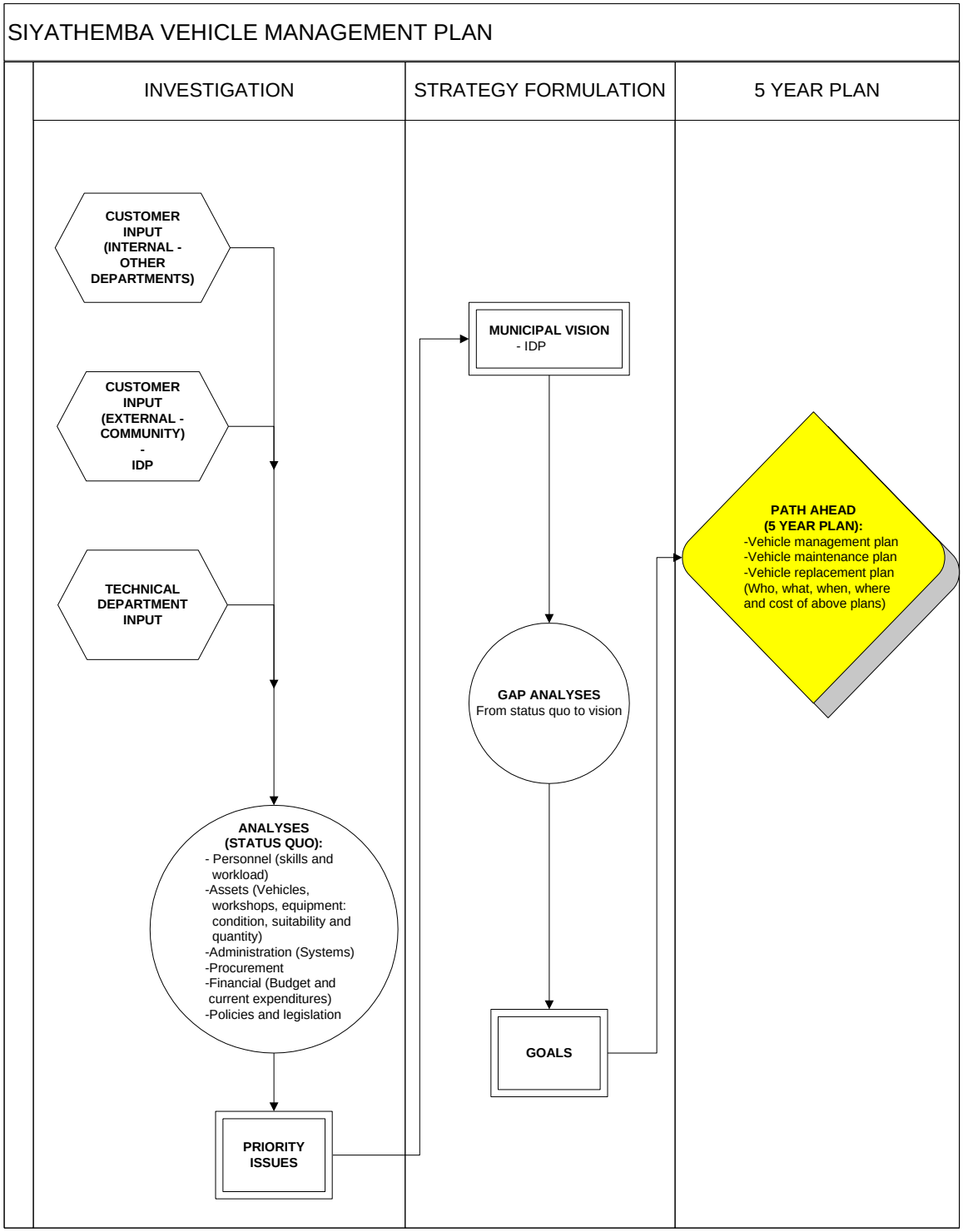
ROLE -PLAYERS	ROLES AND RESPONSIBILITIES
Municipal council	Final **decision** making / **approval** of strategy. Monitoring the implementation of strategy. Monitoring the continuation of strategy.
Councillors	**Linking** vehicle strategies to their constituencies / wards Feedback to community
Executive committee or Executive Mayor / Municipal manager / CEO	**Decide on planning process**: nominate persons in charge: monitor planning process **Overall management and co-ordination** responsibility (to make sure all relevant actors are involved)
Planning professionals / facilitators They may be from municipal administration or contracted according to availability.	**Methodological guidance / facilitation of planning workshops / documentation / special studies**
Municipal Officials (Technical officers , heads of departments)	Providing technical / sector expertise and information. Implementation.
DBSA (Development fund)	Provide funding Advise according to experience

2.2 PROCESS OVERVIEW: STEPS AND EVENTS

The Schematic drawing and Gantt chart below indicates the process followed during the compilation of the plan.
The investigation phase consisted of discussions with the Technical department as well as role-players in other departments (internal customers). The IDP was used to determine vehicle related needs from the external customers. A detailed Analysis was done incorporating inputs from all departments, and the priority issues coming from all above components were then summarised.
Due to the process being started with slightly different outputs in mind, the analyses did not fully include all the institutional aspects. Since the records kept by the municipality were not comprehensive, the costs for maintaining each vehicle could not readily be withdrawn, and calculations of optimal replacement time were not done. The entire fleet however is of extremely high age.
In the Strategy formulation phase, a gap analyses was done between the status quo and the vision of the Municipality. From the gap analyses, goals were determined.
A 5 year plan was compiled addressing the goals.
The implementation of the plan, which does not form part of this assignment, would be crucial for the success in achieving the goals.

Task ID	Activity/Task	Duration
P1	Vestigings Fase	8d
P1T1	Vestigings vergadering	8d
P2	Ondersoek Fase	5d
P2T1	Voertuie	5d
P2T2	Personeel	5d
P2T3	Stelsels	5d
P2T4	Fasiliteite	5d
P3	Ontledings Fase	36d
P3T1	Otleding	36d
P4	Beplannings Fase	60d
P4T1	Voertuig Bestuursplan	10d
P4T2	Voertuig Onderhoudsplan	10d
P4T3	Voertuig Vervangingsplan	10d
P4T4	Finale Verslag	50d





2.3 SELF-ASSESSMENT OF PLANNING PROCESS

Originally the total project and investigation started off as a technical vehicle plan and the original purpose of the document was not of strategic nature. During the process, and in consultation with the municipality and the DBSA, the project was transformed into a strategy, rather than a plan. The municipality will have to implement the strategy and monitor it on a regular basis.

The officials at the municipality were eager to assist in the process and the compilation of the strategy could be viewed as a combined effort.

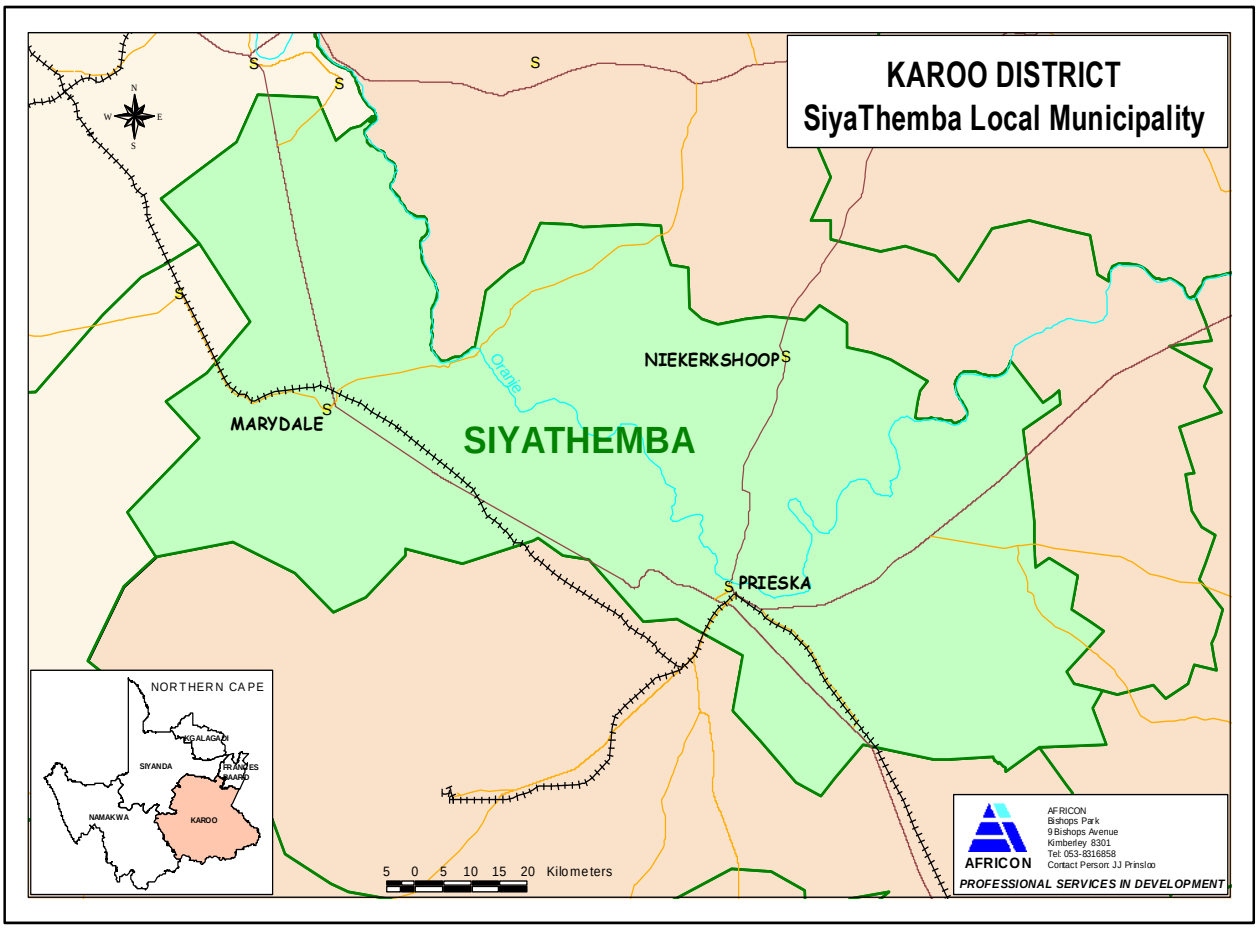
In retrospect, the project should have been addressed with a wider perspective in mind. Some relevant issues, like the investigation of the cost to perform specific functions in relation to the cost of fulfilling the function by using private/public partnerships (for instance maintenance of parks), were nor addressed in the investigation.

Since the municipal records regarding maintenance costs of individual vehicles were not complete, the calculations of optimal replacement time were not done. With good record keeping, the municipality would be able to do this internally within a couple of years. The GAMAP guidelines used in the report is not specific for Siyathemba conditions and can only be seen as a guideline. Through good record keeping, the municipality could also refine these into norms within a couple of years.

3 THE SITUATION

3.1 REGIONAL SETTING

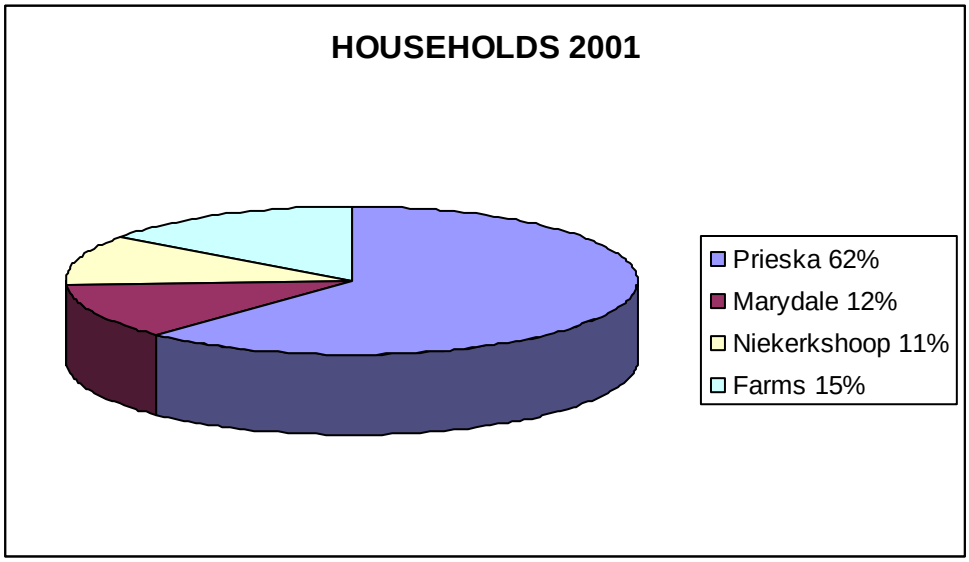
Siyathemba Municipality is located within the Karoo district area, within the Northern Cape Province and is constituted of Prieska, Niekerkshoop and Marydale. Prieska, which is the largest of the three towns in Siyathemba, is the seat of the municipality and it is located approximately 240km south-west of Kimberley on the N10 route. Niekerkshoop is approximately 63km north of Prieska and Marydale is situated approximately 70km north-west of Prieska.
Siyathemba Municipality covers 825 655,535Ha of land. The layout of the municipal area could be seen on the following locality map.



3.2 CURRENT REALITY: BASIC FACTS AND FIGURES

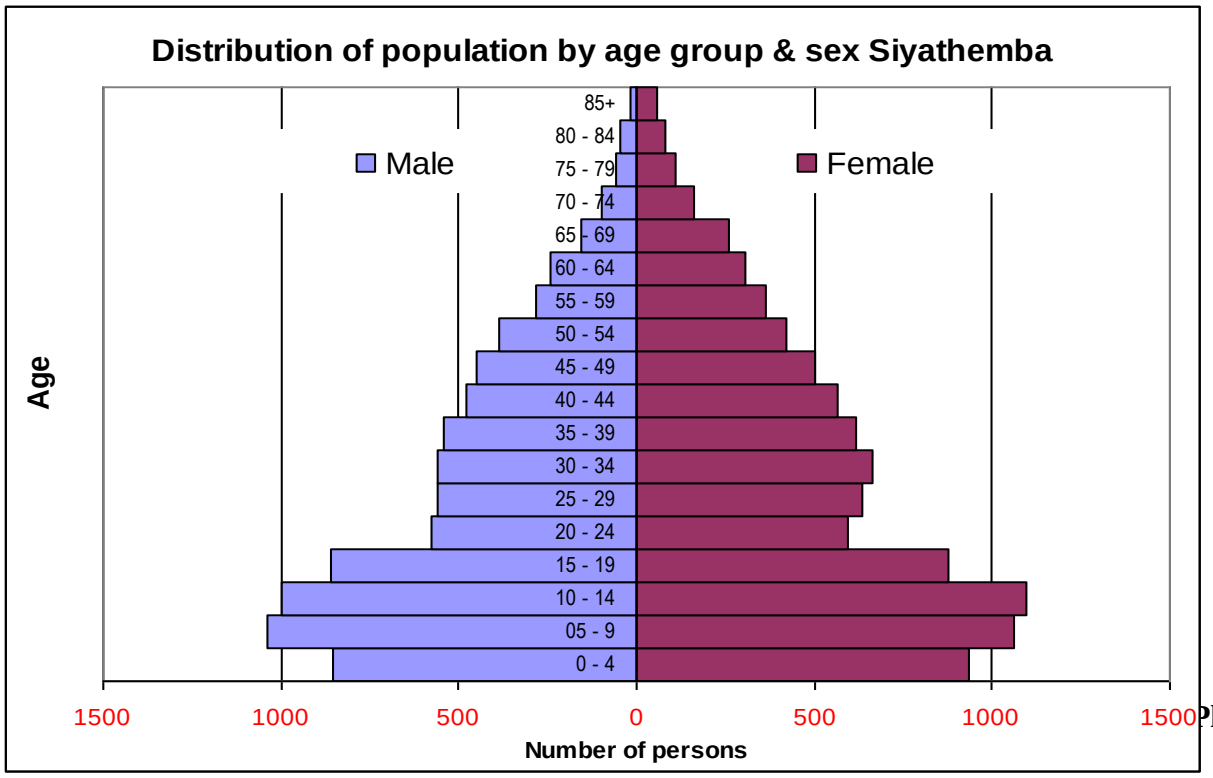
3.2.1 Population and Language:

According to the latest census (2001), the population of Prieska is 11514, the population of Marydale is 2081, the population of Niekerkshoop is 2000 and the population on farms is 1924, bringing the total population of Siyathemba to 17519. The area has a total of 4180 households.



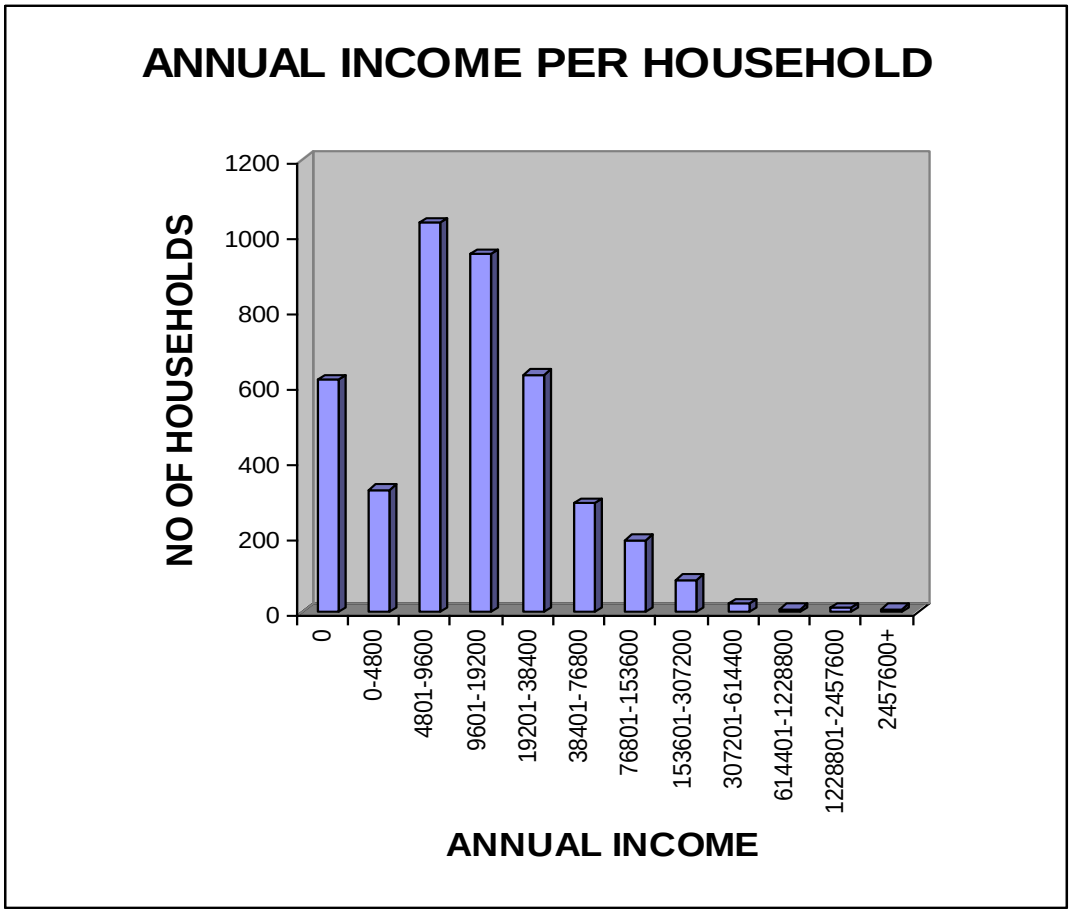
The languages being used in the area are Afrikaans, English and isiXhosa with Afrikaans being the language of choice for the majority of the population.

Population age:
From the graph below, a dip in the "working age group" can be seen (age 20 to 40). This could be due to a shortage of work, where people in this age group left the area in pursuit of work elsewhere. HIV/AIDS could also possibly have an influence on the "dip" in the working group.



3.2.2 Household income:

In Siyathemba 1976 of the 4180 households (47%) have an annual income of less than R9600.00/year (R800.00/month). This is an indication that the community is relatively poor. From the Census 2001 data it could also be stated that 13907 (79%) of 17513 people in Siyathemba is not economically active.



3.3 SUMMARY OF COMMUNITY PRIORITY ISSUES

For the purposes of this project, the community was not consulted. Issues related to vehicles, coming from new IDP projects, would not be addressed utilising municipal vehicles. The municipal vehicles are only used for day-to-day operations and maintenance purposes.

3.4 PRIORITY ISSUES FROM A TECHNICAL DEPARTMENT PERSPECTIVE

The technical department has reported the following problems and difficulties in managing the vehicle fleet:

- The vehicles are very old and should be replaced
- Operations of the vehicles and plant are not cost effective due to poor condition and unreliability
- Maintenance costs of vehicles and plant are excessive
- A need exists for a maintenance program in order to reduce maintenance costs.
- Management of and control over the vehicles and plant are lacking due to the fact that insufficient records are being kept of operations of the plant and vehicles
- Insufficient record keeping of costs directly to vehicles

3.5 IN DEPTH ANALYSES

The purpose of the in-depth analysis is to ensure that the strategies and projects are based on a thorough knowledge of all the relevant aspects of the priority issues identified to ensure that the strategies:

- Respond to causes rather than symptoms
- Deal with the problems in context
- Consider potentials, opportunities and initiatives for resolving priority issues

3.5.1 Municipal Functions

According to the constitution of South Africa, (Chapter 10, 175 – Power and function of local government, point 3) a local government shall, to the extent determined in any applicable law, make provision for access by all persons residing within its area of jurisdiction to water, sanitation, transportation facilities, electricity, primary health services, education, housing and security within a safe and healthy environment, provided that such services and amenities can be rendered in a sustainable manner and are financially and physically practicable.

Delivery of basic service are therefore one of the primary functions of Siyathemba Municipality.

The Siyathemba Municipality render the following services:

- Water supply
- Sanitation services
- Electricity supply
- Library
- Roads and storm water
- Cleansing
- Parks
- Traffic
- Emergency services

The full extent of the respective services were however not available in the IDP and further investigations were not conducted as reliable data were not available.

3.5.2 Municipal Management Structure

The organisational structure of the municipality makes provision for the following departments:

- Infrastructure and Development
- Financial
- Strategic Planning and Administration

The Infrastructure and Development Department is by far the largest as it is primary responsible for the delivery of basic services to the people of Siyathemba. Every department further have personnel in the towns of Prieska, Niekerkshoop and Marydale.
The management structure of the Municipality is included in Annexure I.

3.5.3 Fleet and Equipment Management

The municipality operates its fleet on a decentralised basis. In practice this means that vehicles and plant are allocated to the respective departments and the departmental head is then responsible for the effective management, operation and maintenance of the vehicles and equipment under his control.
The allocation of the fleet of 62 is arranged according to the municipality's financial system. (Small plant such as mowers and pumps are not included as they are normally not regarded as vehicles or plant.)
The present vehicle allocation is summarised as follows:

Type of Vehicle / Plant	Administration	Emergency Services	Traffic	Public Works	Parks	Cleansing	Sewage	Electricity	Water	TOTAL
	Department									
Light Bus										
Fire Engine		1								**1**
Fire Trailer		1								**1**
LDV	1		1	2	1	1	2	2	5	**15**
Tip Truck				3						**3**
Water Truck				2						**2**
Vacuum Truck					1		1			**2**
Refuse Truck						1				**1**
Crane Truck								1		**1**
Tractor				2	2	3	2			**9**
Trailer				5	2	4	2			**13**
Water Trailer				1						**1**
Vacuum Trailer							2			**2**
Night soil Trailer							1			**1**
Road Grader				2						**2**
Loader				1						**1**
Light Roller				1						**1**
Roller Trailer				1						**1**
Heavy Roller				1						**1**
Compacter				1						**1**
Concrete Mixer				1						**1**
Compressor								1		**1**
Generator							1			**1**
Total	**1**	**2**	**1**	**23**	**6**	**9**	**11**	**4**	**5**	**62**

The municipality has embarked on a vehicle and plant purchasing programme as from the 2003/04 financial year. This programme does however not form part of the analysis phase and will be addressed in the Development Strategy chapter (Chapter 4, Page 20).

3.5.4 Transport Administration System

Keeping of logbooks and organising of services is the responsibility of each head of department. Vehicle log/control sheets are in the process of being implemented.
No official system for the effective administration and monitoring of neither the functioning nor the quality of the municipality's vehicles and equipment fleet is in place.

3.5.5 Maintenance System

Siyathemba Municipality operates a decentralised fleet in which each department is responsible for budgeting for their own vehicle operating costs. The operating budget for 2003/04 can be seen in Annexure A.
Each department is responsible for the repairs and maintenance of vehicles allocated to it.

> **No preventative scheduled maintenance is currently being done and the majority of maintenance actions are crises/ad hoc maintenance.**

3.5.6 Repair and Maintenance Facilities

The municipality has confirmed that most vehicles and plant can be serviced and repaired in Prieska. They reported that spares availability in Prieska does not pose a problem as spares not available locally can be sourced within three working days, if available in South Africa.
Due to difficulties in recruiting a competent mechanic in Prieska, the workshop can not be utilised to its fullest potential. ***The Municipal workshop is therefore equipped to do only minor repair and maintenance work.***
Since the Municipality are currently outsourcing the repair and maintenance work, the condition and suitability of tools and machinery were not investigated
The store is being kept neat and tidy and a good control system is currently in operation.

3.5.7 Vehicle Utilisation

Due to a lack of records, the workload and utilisation of the respective vehicles and plant could not be determined.

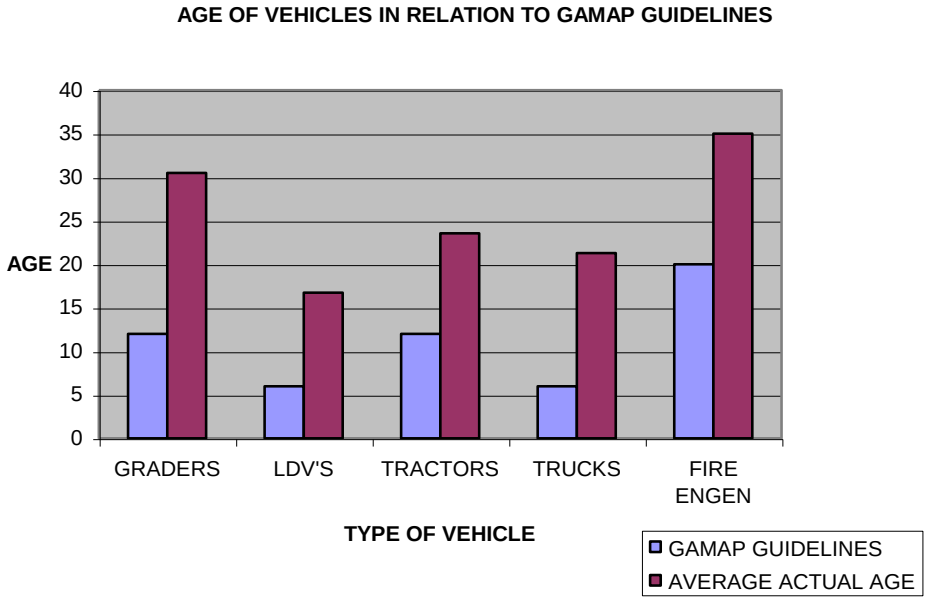
3.5.8 Asset Register

An Asset Register has recently been compiled by Munifin Solutions under the Municipal Support Program (MSP). All vehicles are captured on the asset register against a unique number.
This asset register are however prepared from a financial perspective. **For the effective operation of the fleet a separate Vehicle and Plant register should be maintained**. In Siyathemba this is however not the case.

3.5.9 Valuation of Fleet

a) Age of vehicles and plant:
The vehicles of Siyathemba Municipality have been allowed to age beyond all economical and practical bounds. The present average age of the fleet is in excess of 23 years. By comparison, should a 10 year life cycle policy be followed, the average age of the fleet would be five years.
The vehicle types are compared against GAMAP guidelines for average vehicle age and are given in the table and graph below:

Plant/ Equipment Type	GAMAP guideline	Actual ave age
GRADERS	12	**30.5**
LDV'S	6	**16.7**
TRACTORS	12	**23.6**
TRUCKS	6	**21.3**
FIRE ENGEN	20	**35.0**



The results indicate that the entire vehicle fleet has been allowed to age beyond acceptable norms. **On average the vehicles are two to three times older than these guidelines. This indicates to the lack of an effective replacement program and policy.**
A fact that should be borne in mind is that the value of the vehicle diminishes with time whilst the repair costs escalate. The breakeven stage is expected to be at industry or GAMAP guidelines for asset life. Most repair expenditure beyond this stage is expected not to be cost effective. As the repair costs escalate with age, reliability and availability reduces to such an extent that it becomes hardly possible for the operational units to ensure effective service delivery.
Details for every item and calculations are given in Annexure E.

b) Condition of vehicles:

A condition assessment has been undertaken for all vehicles and plant excluding trailers. Repair cost estimates have also been calculated where applicable. ***Our calculations show that 34% of the vehicle fleet has an estimated repair cost of more than its fair value. Only 13 of the 63 vehicles are in a good or fair condition.***
The calculations are presented in Annexure F

c) Valuation of fleet:

The present replacement value of the fleet is R14,537,000 and the present fair value is estimated at R1,039,300. By comparison the independent valuation done for the Financial Asset Register was R1,310,900. ***The ratio of fair value to replacement value is 7% against a ratio of 39% based on a 10 year life cycle.***
The valuation is based upon the formula and criteria given in the Annexure D.

3.5.10 Outsourcing:

Suitable vehicles and plant are not readily available in Prieska for hire. The nearest sources are Kimberly, Upington or Carnarvon. Transport costs for plant, i.e. hiring of low bed, are in the order of R10 per kilometre. The distances the transporter has to travel are approximately 1000 kilometres per transaction (compiled as follows: 250 km to Prieska

and 250 km to return empty, for delivering the vehicle and on collecting the vehicle from Prieska, 250 km empty and 250 km to return with vehicle. 1,000 kilometres at R10 per kilometre). This translates to R10,000 for only the delivery and collection of the item of plant. Should a hire vehicle be required the municipality will call for quotes and make appropriate arrangements. Generally, the municipality only hires a dozer twice per year for approximately a week at a time to excavate and stockpile sufficient gravel material to last for a period of six months for repair and surfacing of gravel roads.

3.5.11 IDP Projects:

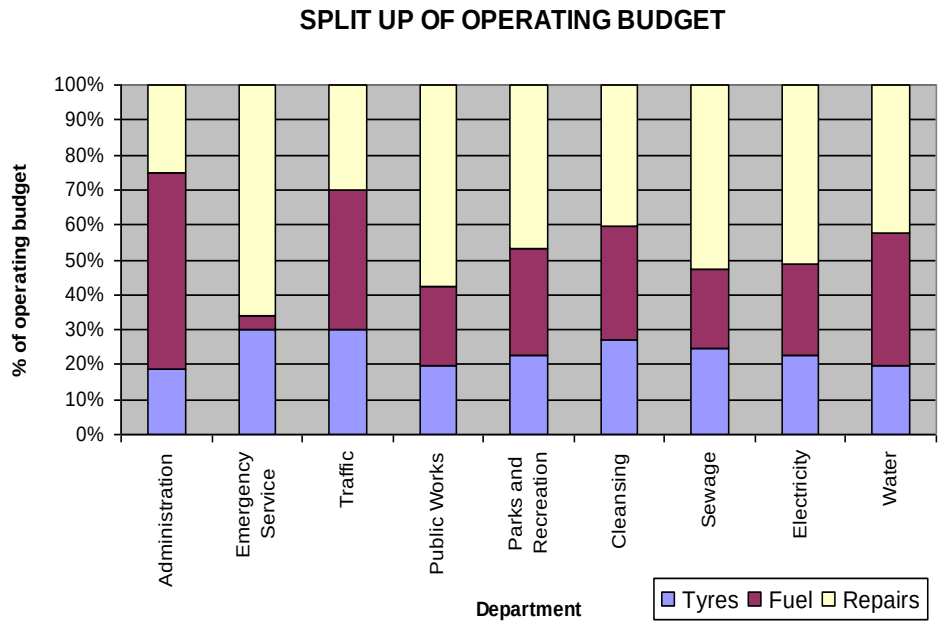
Mr Charles van Wyk expressed the opinion that new IDP projects will involve construction work for which Siyathemba Municipality is not equipped nor has the capacity to implement in-house. It is anticipated that these projects will be done on a contract basis. When new projects are planned, the availability of internal plant and vehicles should still be taken into account.

3.5.12 Human Resources

Mr Nicoliasen is responsible for the technical control over repairs and maintenance. Siyathemba Municipality has no mechanical artisan at present. The only person in the workshop is an artisan's assistant. This person is able to do the basics such as changing filters and fan belts and a little welding. For the remainder of the maintenance and repair work extensive use is made of agents, accredited service providers or local engineering works.
The human resources of the municipality were not analysed in depth. **Consideration should be given to recruiting a mechanical artisan for reducing the burden on the assistant manager and infrastructure.**
The Municipality should ensure that operators and drivers are capable and have applicable licenses and are trained properly in operating and maintenance of their vehicles.

3.5.13 Budget

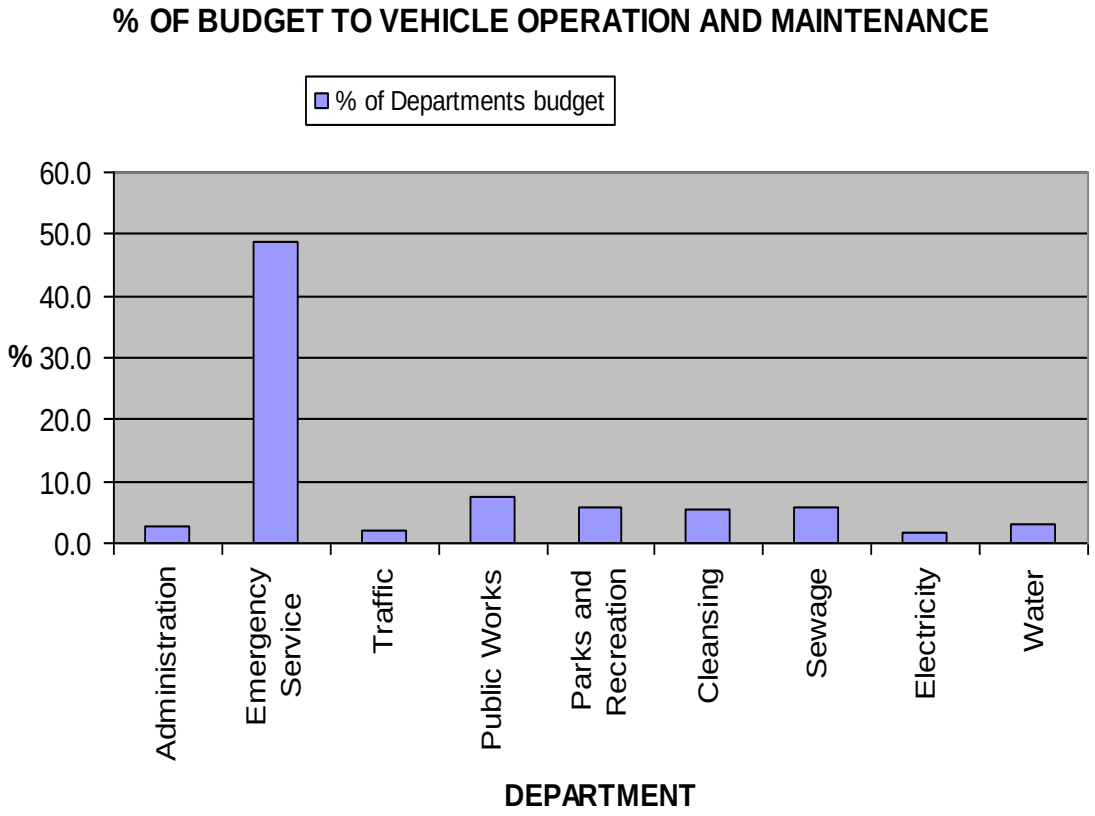
The total expenditure budget for the 2004/05 financial year is R20,303,028 and budgeted income is R20,401,034 rendering a surplus of R98,006.
Details of the budget are contained in Annexure A.
The budget makes provision to service a DBSA loan in respect of the first phase of the planned Vehicle Purchase Programme.
The municipality operates its vehicle fleet on a decentralised basis. The respective departments are responsible to budget for the operations and maintenance of the municipal vehicles allocated to them. They are also responsible to manage their respective budgets.
The vehicles are very old with no present interest and redemption payable. Due to age, relative low availability, unreliability and lack of utilisation figures available, it is not possible to obtain a meaningful comparison between the budget/expenditure for materials, manpower and vehicles.
Vehicle operation and maintenance costs are split into three categories/votes namely, tyres, fuel and repairs. **The repairs vote is further complicated by the inclusion of other costs not directly related to vehicle repairs and maintenance, such as license costs**. The inclusion of license costs makes it difficult to monitor the actual maintenance costs**. We recommend differentiating between these expenses by adding another category.**
The split among tyres, fuel and maintenance (including licence costs) are illustrated in the following graph:



The vehicle operating budget for 2003/04 amounted to R826,230 representing 4,5% of the total 2003/04 budget of R18,211,668. **This is extremely low, taking the condition and age of the fleet into account.** A figure of 16% for the operating budget of the total budget would be more in line with the requirements. A proposed budget calculation was done with the following results:

Budget Calculation			
Replacement Value of Vehicle Fleet		R	14,537,000.00
Annual Cost of Operation - Percentage of Replacement Value	**23%**	**R**	**3,392,629.73**
Calculation of Proposed Budget (% of Proposed annual Cost of Operation)	**% of Annual Cost of Operations**		**Proposed Budget**
Fuel Costs	36%	R	1,228,085.76
Tyre Costs	5%	R	169,157.82
Licence Costs	2%	R	58,148.00
Maintenance & Repairs	19%	R	639,628.00
Sub Total		**R**	**2,095,019.58**
Depretiation	38%	R	1,297,610.15
Total Operations Costs for Vehicle Fleet	**100%**	**R**	**3,392,629.73**

Details for the calculations are included in Annexure G.
The following graph indicates each department's operating and maintenance budget in relation to their own total budget.



Details of the 2003/04 operating budget are contained in Annexure B
Replacement budget:
The municipality has arranged for an external loan to replace worn and obsolete vehicles. The capital budget makes provision for the replacement of vehicles in two phases. Phase 1 is to address the most pressing needs, followed by Phase 2 for the next most urgent replacements.
Details of the capital budget are contained in Annexure C.

3.5.14 Costing and expenditure control:

Vehicle expenditure is controlled in the following manner. A budget is drawn up for each vehicle under the headings, tyres, fuel and repairs and is totalled per operational unit (refer to Annexure B). Expenditure incurred against a particular vehicle is recorded against that vehicle's budget up to the budget amount. Where the budget limit has been reached for a particular vehicle, further maintenance and repair costs may be allocated against the budget of another vehicle within the same operational unit on condition that the total vehicle budget for the unit is not overspent. In this way the municipality makes it possible that a vehicle remains operational. Care should be taken to ensure good record keeping, in order to be able to adjust the next budget accordingly and for measuring operating cost of each vehicle for replacement calculations.
It is sometimes necessary for one department to utilise the vehicles of another department. The current procedures do not make provision for the costs associated with a vehicle on loan to be

transferred from the "loaning" department to the "borrowing" department. This is not seen by the municipality to be serious as good co-operation exists between the departments.

3.5.15 Replacement Strategy/Policy

Siyathemba municipality do not have a vehicle and plant replacement strategy or policy in place. Their current management and administrative systems also do not support the implementation of an effective replacement strategy.

Municipalities normally experience higher demands on their scarce capital funding than they have available. In order to balance their budget it is necessary to prioritise their capital expenditure needs which often results in planned vehicle purchases being one of the first cuts to be made. This practice has left many municipalities with an old fleet that cannot function properly as vehicles are unreliable with high repair cost demands. This has a serious negative impact on service delivery. Most municipalities are not able to meet the GAMAP guidelines with respect to the average asset life. Industry or GAMAP guidelines should be adjusted to suit specific conditions. The estimated replacement value of the Siyathemba Municipality vehicle fleet is currently R14,5 million. In order to comply with the above mentioned strategy, the annual capital budget required for replacement of vehicles should be R1,45 million. **As the fleet is so aged a large capital injection is required in the short term in order to significantly improve the situation, hence there is a need the need for a Vehicle Purchase Program.**

Vehicles have a finite economical lifespan. When the economical lifespan of a vehicle is exceeded the following results:

- excessive repair demands
- expenditure on repairs that is not cost effective
- vehicle unreliability
- reduced availability of the vehicles due to increasing incidents of breakdowns and repairs

To manage vehicles effectively a Replacement Policy must be formulated. To action the Replacement Policy a Replacement Plan must be compiled for each financial year taking into account capital available, the ability to service loans and the repair budget required to ensure vehicle reliability and availability during the financial year.

3.6 PRIORITY ISSUES IN CONTEXT: SUMMARY OF IN-DEPTH ANALYSES

The following priorities were identified and grouped according to function:

3.6.1 Condition of Vehicles and Plant

- The **ratio of fair value to replacement value is 7%** against a ratio of 39% based on a 10 year life cycle.
- Our calculations show that 34% of the vehicle fleet has an estimated **repair cost of more than its fair value**.
- Only 13 of the 63 vehicles are in **a good or fair condition**.

3.6.2 Fleet and Equipment Management

- **Every department** is responsible for the repairs and maintenance of vehicles allocated to it.

3.6.3 Administration and Operations

- The **workload and utilisation** of the respective vehicles and plant could not be determined, due to a lack of records.
- No official operational system for the effective **administration and monitoring** of neither the functioning nor the quality of the municipality's vehicles and equipment fleet is in place.

3.6.4 Maintenance System

- **No formal preventative/scheduled maintenance** is currently being performed and the majority of maintenance actions are on an ad hoc basis or of crises maintenance nature.

3.6.5 Human Resources

- Consideration should be given to **recruiting a mechanical artisan** for reducing the burden on the Assistant Manager and Infrastructure.
- The Municipality should ensure that operators and drivers are capable and have applicable licenses and are **trained properly in operation and maintenance** of their vehicles.

3.6.6 Replacement policy and programme:

- Siyathemba municipality do not have a vehicle and plant **replacement strategy and/or a replacement policy** in place. Their current management and administrative systems also do not support the implementation of an effective replacement strategy.
- On average the vehicles are **two to three times older than the GAMAP** guidelines. *This indicates to the lack of an effective replacement program.*
- As the fleet is so aged **a large capital injection is required in the short term** in order to significantly improve the situation, hence there is a need the need for a Vehicle Purchase Program.

3.6.7 Financial Management:

- The 4.5% **operating budget of the total budget is extremely low**, taking the condition and age of the fleet into account. A figure of 16% for the operating budget or 23% of the Replacement value of the fleet would be more in line with the requirements.
- For the effective operation of the fleet a **separate Vehicle and Plant register is maintained**

4 DEVELOPMENT STRATEGIES

The Municipal Systems Act says that a Municipality is supposed to determine:

- A Vision for long-term development
- Development objectives
- Development strategies which are to be aligned with national or provincial sector plans and planning requirements.

For the purpose of this study we have taken the vision and mission of the municipality that was developed in their IDP.

4.1 THE MUNICIPAL VISION

Siyathemba undertakes to improve the standard of living of its entire community by delivering a perceptible and affordable service.

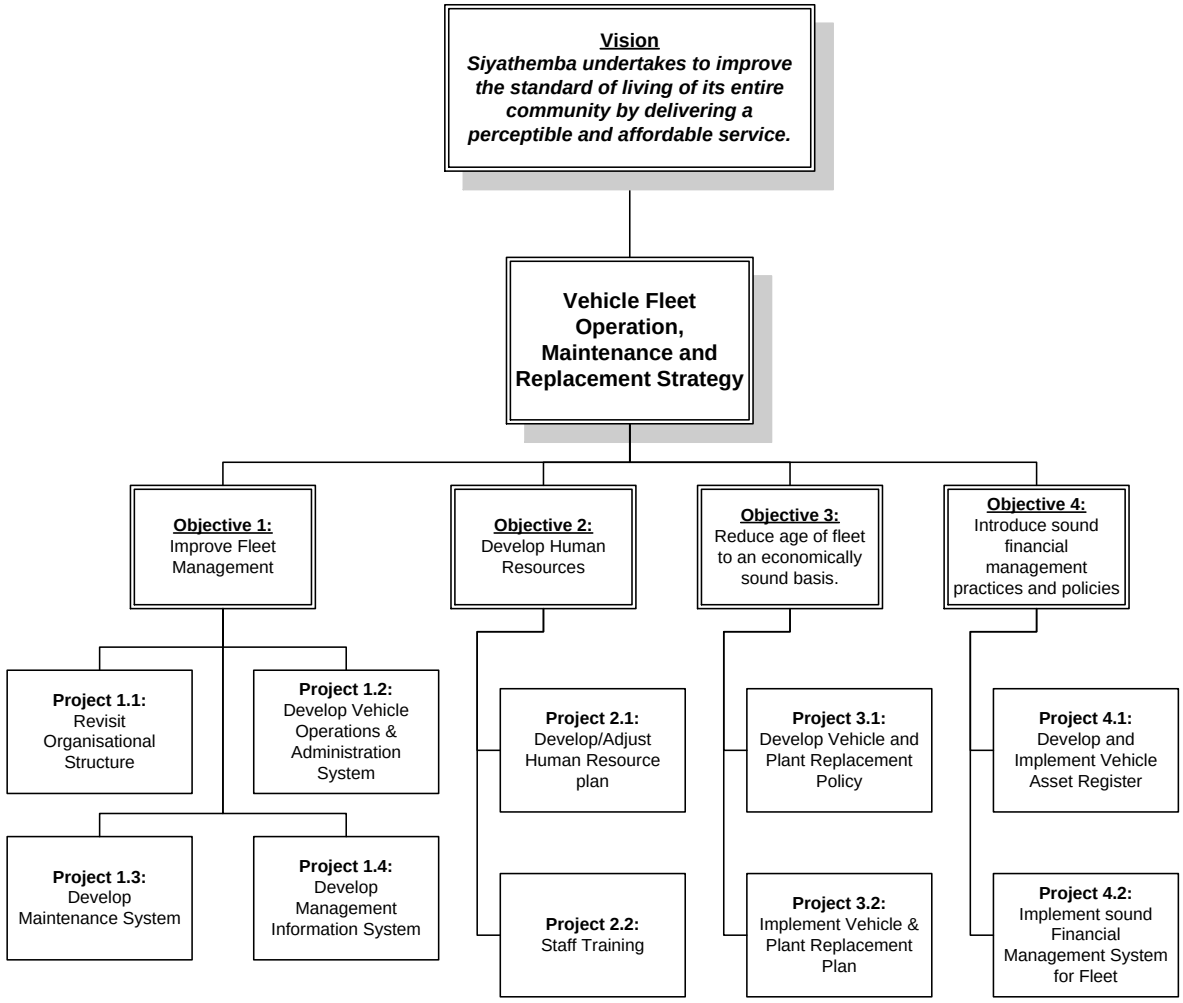
4.2 THE MUNICIPAL MISSION

To be a developmental municipality which has the interest of its communities at the centre of all its activities. This will be done through:

- An optimal distribution of resources;
- Economic development through job creation and a poverty reduction strategies;
- Effective and efficient service delivery through optimal distribution and human resources development; and
- **Effective and efficient maintenance of equipment and buildings.**

4.3 OBJECTIVES AND STRATEGIES FOR EACH PRIORITY ISSUE

In order to reach the municipal vision, the following strategies have been identified:



4.4 STRATEGIES

4.4.1 Objective 1: Improve Fleet Management

Lack of effective management is the factor with the greatest negative impact on vehicle and plant operations and maintenance. This is particularly evident when there are no clear defined objectives, no long-term planning and no short term programming or budgeting in place. Other typical failings are:

- There is a lack of operational management tools for programming, performance evaluation and control of activities.
- There is a lack of information to guide the formulation of operation and maintenance plans and to identify staffing profiles and training needs
- There is a lack of effective preventative maintenance procedures to minimise breakdowns and prolong the operational life of the vehicles and equipment.

These factors all contribute to the poor performance of the vehicle and plant fleet of Siyathemba Municipality.
This strategy is designed to redress most of the deficiencies in the management systems that were identified.
The following plans/projects should be implemented, preferably simultaneously, in order to improve the management of the vehicle and plant fleet of Siyathemba Municipality.

4.4.1.1 Project 1: Implement Functional Organisational Structure for Fleet Management

The objective is to link the necessary activities to the municipality's organizational structure that will enable operation and maintenance of vehicle fleet to reach objectives and targets and will ensure proper functioning of the fleet.
Given the importance of operation and maintenance, it is clear that the municipality's organisational structure must allow for coordination between the different units responsible for implementing operation and maintenance and related activities, especially when implementing the projects identified through this study.
Human, financial and material resources should be constantly available for carrying out operation and maintenance. Such resources should be allocated to various units according to their responsibilities and objectives.
For the municipality to function effectively, it must have decision-making processes at different levels. There must be adequate information processing and flow of information to the centres of decision.
Management activities and centres of decision should be organized according to lines of authority (hierarchical) and coordination (functional). These elements may be combined in a variety of ways. Success depends not just on the choice of structure but also on the human and material resources available, the quality of the decision-making process and human relations both within the municipality and outside it. The effectiveness of the municipality will also be restricted by constraints in its working environment.
The following activities should be linked to the organisational structure:

- Planning, management and control of operation and maintenance activities of the vehicle and plant fleet
- Supervision and support of operation and maintenance activities
- Operational activities and maintenance of vehicles and plant

Activities

A functional organisational structure can be implemented through a series of activities.

- There must be an assessment of how objectives and targets can be achieved through management activities and organizational functions within the municipality's operational system at all levels. This will involve:
  - Determining objectives and targets, as well as criteria for physical and financial measurement;
  - Obtaining information and describing activities carried out by the units responsible for operation and maintenance activities, representing management activities and organizational functions in the form of a matrix; identifying existing lines of communication and levels of operation and decision in the different units in relation to management activities (planning and scheduling, organization and coordination, direction, selection and development of personnel, evaluation and control) in the long, medium and short term;
  - Determining how many staff (and with what qualifications) are needed to implement activities at the different levels, indicating their employment status (full-time, part-time, etc.)
  - Assessing factors that act as constraints on the implementation of activities and hamper the achievement of objectives and goals (degree of motivation and training of staff, data processing facilities, budget, means of communication, etc.);
  - Assessing effectiveness of the municipality's current organizational structure in fulfilling its targets.
- The next step is to formulate or reformulate the municipality's organizational structure in terms of the objectives and targets of the operational system. This involves:
  - Defining objectives, physical and financial targets, quantitative indicators, managerial activities and basic organizational functions to be carried out in order to conduct operation and maintenance;
  - Assigning or reformulating the objectives and functions of the various centres of decision, consolidating operational units, setting up lines of communication between them and establishing decision-making structures for the different spheres of activity at all levels, according to the programmes and projects to be implemented;
  - Developing the new functional organizational structure, defining the management information system and describing functions;
  - Determining the human, physical and financial resources :
  - Studying the economic and financial viability of programmes and their projects; formulating the programme for implementing the organizational structure simultaneously with other programmes and projects (with order of priorities, gradual implementation, etc.) defining objectives at individual and unit levels.
- Finally there is the actual implementation according to the organizational structure. This stage requires:
  - Involving, informing and training staff;
  - Implementing, evaluating, adjusting;
  - Allocating resources

4.4.1.2 Project 1.2: Develop and implement Vehicle and Plant Operations Systems

The vehicle and plant operations system comprises all activities required for the effective operation of the vehicle and plant fleet, for monitoring their functioning and for monitoring the quality of the service.
The system will include a range of activities at different levels throughout the Municipality and includes some of the following;

- Control over the issuing of plant and vehicles, the operation of every vehicle and plant item according to procedures and specifications in order to achieve maximum performance and economy of operation, storage thereof and safekeeping.
- Monitoring of the operations

The following aspects form part of the operations of the fleet and should be implemented as a matter of urgency:

Vehicle Usage, Recording and Control

Each municipality has specific rules, regulations and procedures regarding the use of official vehicles and plant. These cover various aspects such as budget constraints, authorisation of trips, routine maintenance planning etc. Vehicle works returns, commonly known as logs, are the key instrument for recording and controlling the use of vehicles.
The Vehicle Log/Control document designed by Mr Charles van Wyk (copy attached in Annexure P) is suitable and should be used. The information on the vehicle works returns will be of value to the person responsible for monitoring vehicle maintenance (the Assistant Manager for Infrastructure) and the senior personnel of the various departments.

Needs Survey

The vehicle requirements at a municipality remain reasonably stable. However, changes in service levels and delivery processes that effect work programs do occur. This survey also enables the municipality to formally record obsolete and inappropriate types of vehicles. As a first step to address vehicle needs, the transfer of vehicles between departments may be considered. The next step would be to identify the type and size of vehicle required to meet the needs. A record for future purchase planning is thus compiled.

4.4.1.3 Project 1.3: Vehicle and Plant Maintenance System

The objective of this system is to maintain vehicles and plant so that they can function efficiently, continuously and safely, keeping them in good working order and maximise their useful life. It consists of two basic functions: Preventative and Corrective maintenance:

Preventative Maintenance

A vehicle maintenance plan should be based on the following:

- Structured actions – what action must be done at the various intervals;
- Timing – when must the structured action take place;
- Control – ensuring the quality of the structured action;
- Recording – record when the structured action took place and what was done.

Structured Actions

Manufacturers prescribe what must be done at various kilometre readings or hours worked. Routine maintenance is undertaken by the agents or accredited dealers, who have the detail of the structured actions; hence this issue has been addressed. However, should the municipality decide to bring the

routine maintenance in-house it will be necessary to revisit this issue. It is noted that the speedometers of a number of vehicles must be repaired and hour meters fitted to most of the other vehicles.

Timing

It is the responsibility of the vehicle operator to ensure the work returns are completed and submitted weekly to enable the Assistant Manager Infrastructure to plan routine maintenance. The Assistant Manager Infrastructure then arranges with the departmental foreman for the vehicle to be made available for servicing. The key is to ensure that all work returns are submitted weekly. Critical information must be summarised and recorded in a logical useful manner. The best way to do this is to use a wall chart. Annexure M is an example of a useful wall chart. It is recommended that this wall chart be used as it is highly visible to all and contains critical information.

Recording

There are various methods of recording completed actions. The simplest, most visible and effective for a fleet of this size is the wall chart referred to above. The routine maintenance interval requirements can be entered next to the vehicle description and serve as easy reference when planning vehicle maintenance and exercising control.

Control

The wall chart also serves as a control instrument. What actions were done and when are recorded on the chart. The physical quality control is undertaken by the Assistant Manager Infrastructure through inspecting the completed actions. Condition
Each vehicle at more than half life should be inspected on an annual basis in order to assess its condition and estimate the repair requirements for the coming financial year. This is a difficult exercise as unexpected breakdowns do occur. However, normal wear can be determined such as the engine is still running but is heavy on oil, the transmission is noisy but still works, etc. Recording and analysing these problem areas will give a good indication of the general condition and the repair requirements of the vehicles as well as providing input to the replacement plan.

Develop Maintenance System

- Draw up wall chart (see example in Annexure M)
- Ensure the daily completion and submission of the work returns
- Enter the kilometres or hours worked at the end of each week onto the wall chart
- Plan the routine maintenance accordingly
- Advise the vehicle user in advance when routine maintenance is due and agree a mutually acceptable time for the vehicle to be made available
- Make appointment with maintenance service provider, be it internal or external
- Deliver the vehicle to service provider as agreed to
- Undertake a quality inspection of the vehicle after completion of maintenance work
- Return vehicle to user
- Record maintenance information onto wall chart

Check wall chart from time to time to ensure all vehicles are serviced timorously.

Corrective Maintenance

The Vehicle and Plant maintenance system comprises of activities required to remedy failures and breakages of vehicles and plant.
Vehicles require repair actions during their productive life. As Siyathemba Municipality has no mechanical artisan in its employ, extensive use is made of agents, accredited service providers and engineering works. The outsourcing of maintenance work to these organisations must be carefully managed by clearly specifying the repair work to be done and checking the quality of work delivered.

4.4.1.4 Project 1.4: Develop Management Information System for Vehicle and Plant O&M

Objective

A management information system for operation and maintenance of the vehicle fleet aims to provide management at different centres of decision (strategic, tactical and operational) with the information needed to make decisions relating to operation, replacement and maintenance (through accurate collection, measurement, recording, storage and retrieval of data).

Activities

In order to achieve the above objective, the municipality will need to carry out the range of activities listed below:

- Centres of decision must be determined;
- Information requirements and performance indicators must be identified;
- It should be established how often each decision centre needs to receive information;
- It should be determined which subsystem is responsible for generating and recording data for each performance indicator and for transmitting that data to the data processing centre or to decentralized processing stations.
- The structure of the management information system needed for the control of operation and maintenance must be formulated.
- The feasibility of developing the proposed system should be evaluated and priorities should be determined for its introduction. Elements to bear in mind are:
    - The extent to which the system contributes to attainment of the objectives of the decision centres
    - Greatest measurable benefits in relation to production costs
      An assessment of non measurable benefits that may result from the reduction of uncertainty
    - Technical relevance to the development of other information systems in terms of priority, precedence and processing capacity
- Databases must be designed and files set up according to a defined structure, with glossaries, registers and routines for verification and validation for quality control

- Information production processes must be set up. These are:
  Data capture
    - Verification of data
    - Classification of data
    - Ordering of data
    - Processing of data
    - Storage of data
    - Recovery of information
    - Printing and communication
- It must be decided what computer software is required for data processing and what hardware is needed.
- Staff should be trained in the production and use of information
- There must be scheduling, implementation and testing of the management information and decision support systems.
- Finally there must be analysis, evaluation and adjustment.

4.4.2 Objective 2: Human Resources Development

4.4.2.1 Project 2.1: Develop/adjust Human Resource Plan to meet the Requirements for effective Fleet Management

Objective

A municipality that wishes to develop programmes to improve its services should give priority to the development of human resources. Human resource administration and staff development – through training programmes, career plans and an adequate salary system – should be given special emphasis if the staff is expected to improve its knowledge and skills to conduct or support the managerial, technical and operational activities required for the operation and maintenance of the vehicle fleet.

Activities

A municipality intending to develop its human resources will need to take action in the following areas:

- Responsibilities for operation and maintenance should be determined.
- Organizational functions, activities and levels of management should be identified and an occupational matrix should be prepared for the municipality.
- Positions concerned with operation and maintenance within the municipality should be identified and classified by organizational level, type of activity (management, technical support, operational) and location.
- Job descriptions and performance standards should be prepared in order to provide guidance as to the number of staff required in different categories, and the qualifications and knowledge needed to ensure that the goals and objectives of the municipality are achieved.

- Personal profiles of staff currently in important positions should be obtained or updated, a procedure should be established for evaluating personnel, and policies should be prepared for career development and promotion based on performance evaluation.
- The job descriptions should be compared with the personal profiles and performance evaluations of staff to determine where promotion, relocation, horizontal transfer, training or discontinuation of employment is required.
- Training objectives should be defined, in conjunction with programme and project development, and staff development and training programmes should be established. These programmes are required not only for staff but also, as necessary, for community workers and for consultants and contractors employed from the private sector.
- A budget should be established for the scheduled training activities.
- There should be cooperative agreements as necessary, with training institutions.
- Work plans for training should be drawn up annually.
- Simply and easy-to-read instruction manuals, with appropriate illustrations, should be prepared in the local language.
- Human resources development programmes should be implemented on an annual basis.
- There should be evaluation of the performance of individual staff members and of the effectiveness of training programmes in order to decide on follow-up.
- Accident reports should be reviewed and causes of accidents determined in order to develop training programmes to improve safety.
- An operator certification programme should be developed and implemented. If such a programme already exists, operators should be encouraged to participate. Certification is a way of documenting the knowledge and skills of operation and maintenance personnel. Personnel, management and public all benefit from effective certification programmes.
- A programme of employee awards or recognition of outstanding performance should be developed and implemented. Such a programme is another way of enhancing the public image of the municipality and its staff, thereby gaining public support.
- A career development plan should be formulated and implemented in order to create a logical system for promotion and professional development within the municipality. This plan would increase motivation among the staff and would reduce political influence in the selection of personnel to management or operational posts.

4.4.2.2 Project 2.2: Staff Training

As programmes and projects are implemented, arrangements should be made for training. Staff training is essential for the implementation and continuation of a human resources development programme. There must be a budget and qualified trainers and accredited programmes should be used. Expertise from outside the municipality should be used as needed for programme development, preparation of training materials and presentation of training sessions.

The training programmes should be implemented in cooperation with the personnel office to ensure that the activities listed above form part of the municipality's human resource development programme.

4.4.3 Objective 3: Improve the condition, reliability and effectiveness of the Fleet

4.4.3.1 Project 3.1: Develop Vehicle and Plant Replacement Policy

When determining a vehicle replacement policy, the following need to be taken into consideration:

- The projected useful life of the vehicle.
- Possible premature expiration of life due to legislative changes.
- The need to change to a more technologically advanced vehicle for:
  - better performance
  - better use
  - better driver acceptance
  - easier and more economic maintenance
- The possibility of changes in use
- The inability to maintain the existing vehicle to achieve maximum life and maximum residual value.

Vehicle replacement policies can take the following forms:

- Arbitrary: When the vehicle breaks down too often adversely affecting service delivery and making replacement inevitable.
- Predetermined: When the vehicle has reached the end of its originally projected life.
- Productivity oriented: When replacement is determined by cost criteria measured against predetermined productivity standards (e.g. by incorporating downtime measured in terms of volume of deliveries per available working days)
- Rational economic: When replacement is made at an optimum time calculated on the basis of total life costing where total life costs comprises of purchase price plus operating costs less residual value.

Calculation of the Optimum Time for Replacement

The following three cost components have to be taken into consideration when determining the economic useful life of a vehicle:

- The cost of ownership

  The cost of ownership consists of depreciation, interest on capital and replacement cost.

  Depreciation

  The amount of depreciation is the difference between the value (market price) of the asset at the beginning and at the end of each period.

  Interest on capital

  Interest on capital is used to reflect either opportunity costs in case of own capital[1] or annual interest payments in the case of foreign capital (borrowed funds).

1 Provision for opportunity costs is made, as capital can be employed for alternative purposes.

Replacement costs

In order to remain efficient or profitable, organisations need to make provision to replace vehicles. This necessitates an organisation to take increases in the purchase prices of new vehicles into account as costs.

- The cost of maintaining the vehicle;

  The cost of maintenance and repair of a vehicle comprises of a fixed (i.e. routine maintenance which is independent of use of the vehicle) and a variable component (directly attributable to the use of the vehicle).
  The fixed cost component is normally omitted when determining the useful economic life of a vehicle, as it stays constant over the life of the vehicle. However, if it is not entirely possible to differentiate between the fixed and variable component, the total maintenance costs as per cost statements can be used.
  There is however also an indirect or "intangible" cost in terms of maintenance, namely downtime (i.e. the time the vehicle cannot be used, as it is being serviced) which should also be included when determining the economic useful life of a vehicle. This "cost" is obtained by subtracting the time the vehicle was in use from the time the vehicle could have been potentially in use and by allocating a unit cost (opportunity cost) to this time.

- The cost of operating the vehicle.

  A vehicle's operating cost comprise of those cost items that arise as a direct result of using the vehicle, some of the important being fuel cost and oil, insurance costs, license fees and crew costs.
  In this regard it should be noted that maintenance costs are also often included as operating costs.

Based on the above, the optimum time for vehicle replacement can be calculated. This could be done using a computer model. The systems for gathering and compiling of information need to be in place and operational before such a model can be implemented.
For operating such a model, the municipality needs to keep the following data up to date for the entire fleet:

- Asset number
- Registration number
- Make and model
- Date of manufacture
- Replacement value
- Kilometres to date
- Repair costs to date

A model is available from Africon, but operator training needs to be conducted and systems need to be put in place for the operation thereof.
The municipally keep records and use these to determine their own specific guidelines. At least a general 10 year vehicle asset life should be aimed for. In practice this relates to replacing one tenth, based on replacement value, of the fleet per annum. This would ensure an even replacement program, reliable vehicles and sound service delivery by the municipality.
In order to determine a constant yearly budget, it is recommended that a replacement policy allowing for an average vehicle life cycle of 14 years be adopted. The total replacement value of the vehicle fleet is R14,5 million. To maintain a 14 year replacement policy roughly one fourteenth

of the vehicle fleet's value should be made available for vehicle replacement, which translates to an average of R1,04 million annually escalated by the inflation index. This index can be obtained by matching each vehicle to the then current replacement value of the vehicles and dividing the total by 14.

Procurement of new vehicles and plant

As a public institution, municipalities are required to purchase vehicles on tender. To ensure the correct type and quality of vehicle is purchased, special care must be exercised when writing the tender specification. For example, should a 1 ton LDV, long wheelbase with a glass fibre canopy and 2000 cc engine be required this must clearly be stated. Dealer's service plans should be specified, since services are outsourced and the service station should be in close proximity.

Write-off and Disposal of Vehicles

GAMAP guidelines provide a set of procedures for the write off and disposal of vehicles. The fair values determined in the valuation of vehicles, Annexure D, can be used as a guideline for setting of reserve values. If these prices cannot be realised consideration could be given to dropping to two thirds of the reserve price at the auction.

Practical Considerations

Once the total vehicle fleet is renewed (2009), the policy should be adjusted in order to take into account the different life spans for different types of vehicles. The following GAMAP guidelines should then be adjusted, by using actual municipal records, to establish norms for vehicle life spans for the specific conditions at the municipality:

GAMAP GUIDELINES	
ITEM	**ASSET LIFE**
Fire engines	20 Years
Buses	15 Years
Motor vehicles	5-7 Years
Trucks / LDV (bakkies)	5-7 Years
Graders	10-15 Years
Tractors	10-15 Years
Compressors	5 Years

Due to the limited availability for hire of key vehicles and the high costs associated with transporting hire vehicles to Prieska, it is more practical for the municipality to retain key vehicles such as a grader, loader and roller. These vehicles are used irregularly, however when these vehicles are required they are often required at short notice and are used intensively to repair rain damage to gravel roads.

4.4.3.2 Project 3.2: Vehicle Replacement Plan

The ideal replacement plan for sustainable management of a vehicle fleet is to alleviate the peaks and valleys in capital provisioning for replacement of vehicles. As a general rule an average 10 year vehicle life should be aimed for. However, in the case of Siyathemba Municipality an average vehicle age of 14 years is more realistic and achievable. GAMAP asset life guidelines should be kept in mind at all times.

With the omission of the compressor, mixer etc the average vehicle age of the fleet is reduced from 23 to 21,7 years.
The detailed replacement planning is reflected in Annexure J.

The following aspects have been taken into consideration in preparing the table:

- The age of the vehicles
- The condition of the vehicles
- The functional needs of the different departments
- The valuation of the vehicles

The impact of the proposed two phase vehicle purchase programme has been discussed with Messrs Van Wyk and Nicoliasen. It is anticipated that the total number of vehicles will be reduced from 62 to 55.
Annexure H reflects the planned distribution of the 55 vehicles according to Organisational Layout
A comparison between the previous and proposed new allocation of vehicles is indicated in the table below:

a	b	c	d=c-b
Department	**Previous allocation of Vehicles**	**Proposed Allocation of Vehicles**	**Change**
Finance		1	1
Administration	1	1	0
Traffic	1	1	0
Emergency Services	2	1	-1
Electricity	4	4	0
Water	5	2	-3
Sewage	11	3	-8
Parks & Recreation	6	5	-1
Cleansing	9	4	-5
Mechanical	Previously allocated according to budget.	1	
Roads & Stormwater		14	
Marydale		11	
Niekerkshoop		7	
Sub Totals	23	33	10
Total	**62**	**55**	**-7**

One LDV resorts under the Finance department. The administration department has one light bus for office and councillor use and one LDV for traffic. The rest of the fleet resorts under the Infrastructure department. The infrastructure department consists of the following functional services:

- Electricity
- Water
- Sewerage
- Roads and storm water

- Parks and cleansing and
- Mechanical based in Prieska.

Marydale and Niekerkshoop are also resorting under the infrastructure department.
The detail of the planned distribution of vehicles in terms of function/organisational structure is reflected in Annexure I.
After evaluating the work to be undertaken by the proposed 55 vehicles, it is concluded that the Siyathemba Municipality has planned for only their minimum vehicle needs.
The proposed replacement plan can be divided into three Phases as follows:
Phase 1 implemented during 2003/04 financial year.
Details of the proposed Purchases are contained in Annexure C.
The implementation of the Vehicle Purchase Programme, Phase 1 (03/04 financial year) together with the writing off of four vehicles without replacing them, will result in the average fleet age being reduced to 13,6 years.

ITEM TYPE REQUESTED	ESTIMATED PRICE	PURCHASE REQUEST EVALUATION
1 x CATERPILLAR 120 H GRADER	R 1,504,000.00	Smallest suitable grader
2 x ISUZU 9 TON TIPPER	R 900,000.00	Suitable, correct size
1 x ISUZU 9 TON WATER TRUCK	R 450,000.00	6000 litre tank - correct size
1 x TOYOTA CONDOR 2.4 A/C RT	R 180,000.00	Just about the only reasonably priced mini-bus on the market
3 x TOYOTA HILUX 200 SWB LDV	R 315,000.00	Standard LDV suitable for municipal work
3 x Nissan 1400 LDV	R 210,000.00	Light LDV for personnel and smaller loads.
TOTAL	**R 3,559,000.00**	

In the replacement planning, allowance is made to purchase vehicles to the value of R3,559,000 in phase 1.
Phase 2 implemented during 2004/05 financial year.
Phase 2 of the Vehicle Replacement Programme (04/05 financial year) will result in a further reduction of the fleet age to 8,4 years, which relates to an asset life cycle of 16,8 years.

ITEM TYPE REQUESTED	ESTIMATED PRICE	PURCHASE REQUEST EVALUATION
1x CATERPILLAR 914G FRONT END LOADER	R 853,000.00	Medium sized loader. Suitable
1 x CATERPILLAR CS 533 D ROLLER	R 663,000.00	Steel pneumatic type. More suitable for operations.
1 x ISUZU 9 TON WATER TRUCK	R 450,000.00	6000 litre tank - correct size
2 x ISUZU NPR 4000 4 TON TRUCK	R 608,000.00	Suitable as replacement of the smaller trucks used. Correct size.
3 x TOYOTA HILUX 2000 SWB LDV	R 315,000.00	Standard LDV suitable for municipal work
2 x NISSAN 1400 LDV	R 140,000.00	Light LDV for personnel and smaller loads.
1 x FIRE ENGINE	R 1,000,000.00	Fire Engine at Prieska still in working order but only suitable on hard surfaces. Tends to break side-shafts. Cannot be used off-road and is extremely slow.
TOTAL	**R 4,029,000.00**	

In the replacement planning, allowance is made to purchase vehicles to the value R4,029,000 during Phase 2.

Phase 3: Financial Years 2005/05 to 2011/12

The table below serves as an indication how to manage a replacement program to maintain a sustainable and reliable fleet within set age parameters. The actual vehicles to be replaced have to be selected on factors such as age, condition, obsolescence and need.

Asset to be replaced		Financial Year (R's 000)									
Asset No.	Description	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	Total (R's 000)
017	Ford 4000 Tractor			R 200							**R 200**
049	Ford 4000 Tractor			R 200							**R 200**
043	Ford Crane Truck				R 550						**R 550**
019	Ford 3600 Tractor					R 200					**R 200**
060	Ford 4100 Tractor					R 230					**R 230**
009	John Deere Tractor						R 200				**R 200**
029	Nissan Vacuum Tanker						R 450				**R 450**
031	Isuzu 1600LDV							R 109			**R 109**
033	Isuzu 200 LDV							R 109			**R 109**
022	Ford Tractor/Loader							R 250			**R 250**
040	Case Tractor								R 230		**R 230**
035	Isuzu Vacuum Tanker								R 450		**R 450**
013	Bomac Roller									75	**R 75**
062	Massey Ferguson Tractor									230	**R 230**
011	Isuzu LDV									109	**R 109**
Total Cost		**R 0**	**R 0**	**R 400**	**R 550**	**R 430**	**R 650**	**R 468**	**R 680**	**R 414**	**R 3,592**
Average Fleet age (Years)				7.5	7.7	7.1	6.8	6.3	6.1	5.5	
Life Cycle (Years)				15	15.4	14.2	13.6	12.6	12.2	11	

From 2005/06 to 2011/12 an average of R513 000 should annually be budgeted for capital for replacement purposes. From 2012/13 onward a capital budget in the order of R1 million (escalated to allow for inflation) will have to be made available annually.

The table also illustrates how an average vehicle asset life of 14 years can be achieved and exceeded. Quite a number of permutations are possible. The key element here is to integrate age, condition, obsolescence and needs. The planning is based upon:

- A fleet of 55 vehicles with a replacement value of R12,539,000 (compared to a value of R14,537,000 for the current 62 vehicles).

- The condition report compiled being fairly accurate.
- The municipality having the financial means to service the loans for Phases 1 and 2 and can raise the capital to purchase further vehicles as recommended. Phase 1 interest and redemption commitments are approximately R796,000 per annum. After Phase 2 the interest and redemption commitment to service the loans will be approximately R1,7 million per annum for a period of seven to eight years which is approximately 8% of the total municipal budget.

The overall average age of the vehicle fleet is reduced significantly but the average age of different categories of vehicles varies considerably. One area of concern is the tractors which will retain a very high average age of 24 years. These tractors are used extensively by the municipality. A number of tractors are in a poor condition and spares are becoming problematic, for example the John Deere tractor, which is in fair condition, has a problem with spares for its Janmar engine. The agents report that spares are just about unobtainable. Replacement planning should address these aging tractors.
More detail on the proposed replacement planning are contained in Annexure O.
An evaluation of the Vehicle Purchase Program is contained in Annexure N.

Notes:

In the proposed vehicle replacement plan trailers, the compressor, the concrete mixer and emergency generator are excluded due to the nature of the vehicle or low utilization. Age in these cases is less indicative of the amount of work done or wear and tear suffered due to use.

4.4.4 Objective 4: Implement sound financial management systems and policies

4.4.4.1 Project 4.1: Develop and Implement Vehicle and Plant Asset Register

There are two types of asset registers:

- The **Financial Asset Register** containing basically an asset number and a very brief description to identify the item. All assets of the municipality are reflected. Siyathemba Municipality has this asset register in operation.
- The **Vehicle Asset Register** containing salient details of each individual vehicle. An example is given in Annexure L. For managing the vehicle fleet the information contained therein is extremely important.

The **Vehicle Asset Register** should be implemented together with the roll out of the Vehicle Purchase Programme.

4.4.4.2 Project 4.2: Implement Sound Financial Management System for Vehicles and Plant

Without the necessary funding being allocated to the Vehicle and Plant Fleet, for the implementation of all the necessary programmes and projects, this *Vehicle Operation, Maintenance and Replacement Strategy* will only stay a dream.
Sound budgeting is like a promise from the Head of the Fleet, that "if I get these financial resources for the fleet, I promise to fulfil the objectives contained in this strategy ".
This process should ensure that:

b) The operations and maintenance budgets are increased to acceptable standards and thereby sufficient funds are budgeted for the operations and maintenance of the fleet.

c) Record keeping and recording of costs are allocated correctly against the correct post/vehicle or plant item.

d) Sufficient funds are allocated to the implementation of this Vehicle, Fleet Operation, Maintenance and Replacement Strategy.

Financial Management can be regarded as a cycle with five phases:
Results analysis means finding out the relationship between the objectives, resources and achievements. It means using last years experience to perform better next year.
Planning means using the results analysis to decide on the objectives and the need for resources for future years. It is important to decide on priorities during planning: the most important things should be done first.
Budgeting converts the plans into monetary figures.
Accounting is the financial record of the department's actual expenditures and incomes.
Budget monitoring is needed to see if the performance is within the budget and according to plan.

5 OPERATIONAL STRATEGIES

5.1 5 YEAR MUNICIPAL ACTION PROGRAMME

The following 5 year action plan has been developed:

WBS Code	Project/Activity	Objective	Project Outputs	Major Activities	Responsibility	Total Cost	2004	2005	2006	2007	2008	20
1	Improve Fleet Management					R 220,000.00						
1.1	Amend functional Organisational Structure to Accommodate Vehicle & Plant Management	To implement a functional organisational structure that will enable operation and maintenace to reach objectives and targetes, and will ensure proper functioning of vehicles and plant	Well managed of vehicle & plant fleet	Assesment of objectives and targets, reformulate organisational structure and implementation of revised structure	Municipal Manager	R 45,000.00						
1.2	Develop & Implement Vehicle & Plant Operations System	To operate the facilities, vehicles and plant in an effective way in order to deliver a quality service	Operation, control of operations, control of quality of service.	Issuing of vehicles & plant, operations thereoff, monitoring and control of operations	Technical Manager	R 65,000.00						
1.3	Develop & Implement Vehicle & Plant Maintenance System	Keep vehicles & plant in optimum performing condition & prolong operational life	Vehicles and plant in optimum working condition	Corrective & Preventative Maintenance	Technical Manager	R 40,000.00						
1.4	Developing a Management Information System for Vehicle and Plant O&M	To privide management at different centres of decision (strategic, tactical and operational) with the information needed to make decissions relating to operations and maintenancelevels	Accurate collection, measure, recording, storage and retrieval of data/information	Determine centres of decision, identify information required & KPi's, determine responsibility for collection and recording of data, formulate data structure, filing system structured and database designed, training and sheduling		R 70,000.00						
2	Human Resources					R 235,000.00						
2.1	Develop/Adjust Human Resource Development Plan	To improve services by the development of human resources	Adequate and skilled staffed for O&M of Fleet	This comprises all policies, standards and procedures which ensure that the municipality has the personnel it needs and that the personnel are appropriately trained	HR Manager	R 35,000.00						
2.2	Staff Training	To implement and continue a human resource development programme	Adequately trained staff	Conduct training programmes	HR Manager	R 200,000.00						
3	Reduce age of fleet					R 9,143,000.00						
3.1	Develop Vehicle and Plant Replacement Policy	To replace vehicles and plant in a consistant manner	Policy for Replacement of plant & vehicles	Determine Mechanisms for Calculation of Optimum Life of Fleet, Procurement, Write-off and Disposal		R 15,000.00						
3.2	Implement Vehicle & Plant Replacement Plan	Purchase new vehicles & plant to replace old ones & to support new and/or improve ineffective operations	New vehicles & plant purchased & old vehicles disposed of	Specifications, tenders, recommendations, orders & acceptance of vehicles & plant	Technical Manager / Finacial Manager	R 9,128,000.00						
3.2.1	Phase 1 - Purchases				Technical Manager / Finacial Manager	R 3,559,000.00						
3.2.2	Phase 2 - Purchases				Technical Manager / Finacial Manager	R 4,029,000.00						
3.2.3	Future Phases				Technical Manager / Finacial Manager	R 1,540,000.00						
4	Financial					R 35,000.00						
	Develop and Implement Vehicle Asset Register	To have accurate information on all plant and vehicles	Vehicle Asset Register	Gather/collect information and capture in database.		R 15,000.00						
4.1	Adjust financial system	Financial reports and indicators are availeble for the effective management and oprations of the vehicles and plant	Financial administration and accounting system aligned to support vehicle & plant management and operations	Results analysis, Planning, Budgeting, Accounting and Budget Monitoring	Financial manager	R 20,000.00						

WBS Code	Project/Activity	2003	2004	2005	2006	2007	2008	2009	Total
1	Improve Fleet Management	R 0.00	R 0.00	R 220,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 220,000.00
1.1	Amend functional Organisational Structure to Accommodate Vehicle & Plant Management	R 0.00	R 0.00	R 45,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 45,000.00
1.2	Develop & Implement Vehicle & Plant Operations System	R 0.00	R 0.00	R 65,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 65,000.00
1.3	Develop & Implement Vehicle & Plant Maintenance System	R 0.00	R 0.00	R 40,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 40,000.00
1.4	Developing a Management Information System for Vehicle and Plant O&M	R 0.00	R 0.00	R 70,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 70,000.00
2	Human Resources	R 0.00	R 0.00	R 64,636.71	R 49,713.19	R 49,904.40	R 50,095.60	R 20,650.10	R 235,000.00
2.1	Develop/Adjust Human Resource Development Plan	R 0.00	R 0.00	R 35,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 35,000.00
2.2	Staff Training	R 0.00	R 0.00	R 29,636.71	R 49,713.19	R 49,904.40	R 50,095.60	R 20,650.10	R 200,000.00
3	Reduce age of fleet	R 1,799,954.02	R 3,812,137.93	R 2,250,856.90	R 512,020.46	R 513,989.77	R 254,040.92	R 0.00	R 9,143,000.00
3.1	Develop Vehicle and Plant Replacement Policy	R 0.00	R 0.00	R 15,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 15,000.00
3.2	Implement Vehicle & Plant Replacement Plan	R 1,799,954.02	R 3,812,137.93	R 2,235,856.90	R 512,020.46	R 513,989.77	R 254,040.92	R 0.00	R 9,128,000.00
3.2.1	Phase 1 - Purchases	R 1,799,954.02	R 1,759,045.98	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 3,559,000.00
3.2.2	Phase 2 - Purchases	R 0.00	R 2,053,091.95	R 1,975,908.05	R 0.00	R 0.00	R 0.00	R 0.00	R 4,029,000.00
3.2.3	Future Phases	R 0.00	R 0.00	R 259,948.85	R 512,020.46	R 513,989.77	R 254,040.92	R 0.00	R 1,540,000.00
4	Financial	R 0.00	R 0.00	R 35,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 35,000.00
	Develop and Implement Vehicle Asset Register	R 0.00	R 0.00	R 15,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 15,000.00
4.1	Adjust financial system	R 0.00	R 0.00	R 20,000.00	R 0.00	R 0.00	R 0.00	R 0.00	R 20,000.00
	Total	R 1,799,954.02	R 3,812,137.93	R 2,570,493.61	R 561,733.65	R 563,894.17	R 304,136.52	R 20,650.10	R 9,633,000.00

ENVIRONMENTAL MANAGEMENT PLAN

Background, vision and mission

Consistently you find dynamic development taking place in the Siyathemba Municipality and it is no exception. The challenge that we face in the 21st century is mainly to promote the necessary development so that all the needs of the community can be addressed without causing harm to the environment. Therefore it is essential to find a balance between development and preserving of the environment for future generations.

The constitution of the Republic of South Africa determines in Article 24 the following as part of the Bill of Human Rights:

Everyone has the right –

(a) to an environment that it safe for their health and welfare; and

(b) to the protection of the environment on behalf of existing and future generations through reasonable legislative and other measures that :

- Prevents pollution and ecological decay
- Promotes preservation
- Ensures ecological sustainable development and application of natural resources, while it promotes equitable economical and social development.

With all the above in mind it is the task of the Siyathemba Municipality to embody a plan into their IDP to promote sustainable development, taking the well-being of the environment into consideration.

No local municipality can prepare a plan without knowing what it wants to achieve therefore a clear vision and mission is necessary.

i. Vision

The vision of Siyathemba Municipality focuses on development and the improvement of the quality of life of all inhabitants. Considering that the Siyathemba Municipality forms part of the Karoo District Municipality the Environmental Management Plan's vision should be in line with this of the District Municipality.

The vision of the Environmental Management Plan is as follows:

To manage the development of natural resources in such a way that there will be no negative influence on nature and the environment.

ii. Mission

The mission of the Siyathemba Municipality focuses broadly on service delivery, utilisation of resources, economical development and job creation, a safe and healthy community as well as a friendly environment.

With the above-mentioned in mind the mission of the Environmental Management Plan are as follows:

- To deal with the disposal of waste in an acceptable way.
- To manage and rehabilitate the sites where disposal will take place, effectively.
- To control the exploitation of asbestos and other mining activities.
- To ensure the regulation of all land-uses in the MA
- To establish an effective monitoring- and record keeping programme.
- To secure and utilise the personnel of the Council the optimum
- To protect our on-surface water- and water supply; and
- To find a harmonious balance between economical development and -utilisation of the environment on the one side and the preservation and rehabilitation of the environment on the other side.

b What is the view of the SMA?

This is a rural area with no urban area s within its boundaries. The main economical activities in this area are agricultural of nature. There is also mining activities in this area but on a much smaller scale then agricultural activities.

The SMA consist of three separate sections with a estimated total surface of 47 308ha.

Only one worth-mentioning river flows through this area, namely the Orange River. Smaller non-permanent rivers like the Brakriver also appears here, but it does not really influence the economic activities of the SMA.

There are scarcely mountains in this area but many hills. Mountain-ranges that can be recalled is the is the Asbesmountain and the Doringmountain

The climate of this area is mainly semi-desert with excessive temperature. Rainfall is low and normally during summer.

Apart from the Orange River the inhabitants mostly in the Marydale and Niekershoop areas are making use of underground water to provide for their own needs and these of their livestock.

c Legal requirements to comply to when dealing with economic activities

Act on Environmental Preservation,1989 (Act 73 of 1998)
This act is proclamated to make provision for the effective protection and controlled utilisation of the environment. Within this act activities are identified.

Spatial Development Framework

a Background

Since 1652 colonialism shaped human settlements in South Africa along racial and class lines, excluding large sections of the population from the economic, social and environmental benefits of vibrant, integrated, sustainable urban and rural development. These patterns sowed the seeds for the grant apartheid that emerged in the second half of the twentieth century. Grand apartheid was essentially a spatial, even geographic, partition attempt, with dire disintegrative spatial consequences.

Spatial planning in the past era was integrally linked to blueprint or "master: planning as the dominant planning approach. This approach had as its focus the manipulation of the physical environment to implement the plan in an inherently, inflexible, static physical representation of a desired future, which resulted in racially separated and unequal development. The approach was comprehensive in nature, striving to predetermine the use of all land parcels in order to achieve the desired end state of separate development. This desired end state became an inflexible representation of the future which necessitated complete and absolute control on the part of planning authorities.

The effects of this planning approach include displaced urbanisation and a settlement pattern that is grotesquely distorted, fragmented, unequal, incoherent and inefficient. This spatial settlement pattern generates enormous movement across vast areas which are both time consuming and costly thereby entrenching a system of unequal access to economic and social resources as also evidenced in the report of survey of this plan. Features of development patterns in the district and in other parts of the country today are:

- Large dormitory areas far from places of economic, cultural, recreational and educational opportunity;
- Severely overcrowded spatial settlements, forced to depend on limited agricultural land, in turn leading to severe environmental degradation;
- Substantial inequality between the areas set aside under apartheid for white and black residential occupation; and
- Wide disparities in the provision of infrastructure and services.

The spatial planning system that was created to address and support minority interest also led to the evaluation of highly complex, multiple and confusing legal environment for planning. The legal complexity is further aggravated by the fact that the major tools of management and control (e.g. zoning and title deed restrictions) derive their powers from different laws - a situation that further contributed to an already procedurally complex system. These diverse laws, ordinances, etc. also left in their wake a myriad of plans of all with a different legal status (e.g. master plans, guide plans structure plans). All this led to a wide amplitude of terms being used loosely and interchangeably e.g. land planning, land use planning, urban and regional planning, settlement planning and physical planning.

b Spatial Planning and Management Problems:

Some of the main spatial planning and land use management problems currently experienced by the different spheres of government as a result of the planning practice outlined above include:

Disparate land use management system in different former race zones.

Since the democratisation of South Africa in 1994, every municipality in the country is now responsible for the administration of a range of different regulatory systems for managing land use, an inheritance from apartheid policies. This means that different procedures have to be followed by applicants, different standards have to be met and different opportunities are available to members of the public affected by proposed developments. It also greatly increases the administrative burden on under-capacitated municipalities and contributes to the lengthy time periods it takes to get applications processed.

c Inappropriate Historical Rights:

Inappropriate historical rights are serious problems in spatial planning today, because in many urban areas land owners still hold use and development rights granted under inherited planning legislation, some dating as far back as the 1940's. In many cases these rights can be ignored and realized by the rights-holder at their leisure. In other cases however they represent a significant obstacle to the reconstruction and integration of towns. Therefore, local authorities are afraid to plan in ways that might impact on these rights out of a fear that they will be liable to pay compensation. This problem is aggravated by the sense that development rights once granted service indefinitely, until such time as the land owner elects to realize them.

Based on these problems, municipalities are currently compiling and implementing an integrated development plan in order to promote sustainable and equitable development in the post-apartheid South Africa. The Municipal Systems Act that was promulgated in 2000 developed the key concept of the Integrated Development Plan (IDP). The MSA describes the IDP as a single, inclusive and strategic plan for the development of a municipality that will be the principle strategic planning instrument which guides and informed all planning and development, and decisions with regard to planning, management and development in the municipality. Therefore the main purpose of this section is to meet the requirement of the MSA which provides that every IDP should include a spatial development framework which must embody provision of basic guidelines for a land use management system for the municipality.

Thus, the proposed spatial development framework will effectively fulfil the role currently played by LDO's, but now explicitly and directly forming a part of the IDP of the Siyathemba Municipality.

d Principles and norms for spatial development framework:

1. Why spatial planning principles and norms?

The principle and norms for spatial planning collectively form a vision for contemporarily planning in the region as a whole. The contribute a single point of reference, and an overcharging coherent set of policy guides to direct and steer land development, implementation of projects, planning and decision-making in all spheres of government including other public agencies that are either directly or indirectly involved in land use management so that the envisaged outcomes thereof are consistent with the provincial and national objectives. Therefore the principles and norms are to promote the normative based spatial planning first by the Development Facilitation Act (DFA).

2. Aim of the principle and norms:

The overall aim of the principles and norms is to achieve spatial planning outcomes that:

1. Restructure spatially inefficient settlements;
2. Promote the sustainable use of the land in the region;
3. Channel resources to areas of greatest need and development potential, thereby redressing the inequitable historical treatment of marginalised areas;
4. Take into account eh fiscal, institutional and administrative capacities of role players, the needs of communities and environment;
5. Stimulate economic development opportunities in rural and urban areas;
6. Accountable spatial planning, land use management and land development decision-making by all organs of state; maximum openness and transparency in decision-making; and
7. Guide the compilation of the spatial development framework component of the IDP.

e. Purpose

Within the context of the IDP, the primary purposes of a spatial development framework are to:

a. Represent the spatial development goals of a local authority that result form an integrated consideration and sifting o the spatial implications of different sectoral issues;
b. Enable local authorities to develop a broad framework that identifies the minimum public actions necessary to achieve the direction of their spatial plans;
c. Have sufficient clarity to guide decision-makers in respect of development applications;
d. Describe the existing and desired future spatial patterns that provide integrated, efficient and sustainable settlements;
e. Ensure the social, economic and environmental sustainability; and
f. Establish priorities in terms of public sector development and investment.

g. Spatial Development Framework for the Siyathemba Municipality

a. Purpose

In the light of the above discussion and giving the mandatory functions of the municipality, the main purpose of its spatial development framework is as follows:

- To provide the general direction that shall guide decision-making and action over a multi-year period;
- Creation of integrated and habitable towns and residential areas; to create a strategic framework for the formulation of an appropriate land use management system thereby
    a. Informing he decision of development tribunals, housing departments and relevant development committees; and
    b. Creating a framework of investment confidence that facilitates both public and private sector investment in the district ; and
    c. To develop a framework of the municipality's budget and capital expenditure in order to indicate planned spending on projects that have been earmarked for implementation in the region.

b. Proposed spatial development framework for the region is as follows:

i. Integrated settlements and social developments

1. Settlement structure

The findings from this report show that the existing settlement structures in the district is based on a variety of factors such extensive commercial farming practice and colonialism. Because of the dispersed nature of these settlements, it is important that a network of viable centres is promoted to facilitate the provision of services to the whole population. This should also create better condition for both agricultural and industrial development and promote the development of other alternative sources of income, especially in the under-developed or marginalised areas within the district. In this regard, the following levels of settlements structures should be taken into account when developing an integrated spatial framework for the region.

2. Urban Centres:

These centres should be further developed as administrative centre of the region as we as regional centres of the municipal areas. They should be promoted through implementation of urban rehabilitation programmes, e.g. provision and maintenance of existing infrastructure and services to stimulate economic growth and employment opportunities in theses centres. We will also support and encourage municipalities to create wider pavements so as to facilitate pedestrian movements in towns.

3. Urban settlements

These towns have already some services and infrastructure and can be expected to grow over time. Their pattern of growth and change should be controlled ad properly managed through spatial planning or land zoning. This approach would facilitate provision of infrastructure in the areas which in turn will stimulate economic growth over time.

4. Rural Service/ Local Centres

These centres could complement to urban satellite towns in remote areas in order to distribute services more evenly in the district as well as promoting development of employment activities in these areas.

c. Commercial Development.

Having observed that there is a high commercial potential in our towns, we shall in our capacity as Siyathemba Municipality promote commercial development/ LED through the following integrated urban development programmes.

- Strengthening and enhancement of the economic base of the town in order to attract more investment thereto and offer more options for development in general. Therefore the programme will involve the following:
  - Rehabilitation of infrastructure
  - Release more commercial sites for greater utilization of presently under-utilized sites.

- Where practical and expedient, we shall provide or make a provision for higher floor area factors to offer more accommodation and options for business and possibilities for greater returns to development.

g. Integrated residential and social development

a. We shall encourage the growth of local commercial centres in residential neighbourhoods to cater for the low-order, day-to-day needs of the residents through land zoning and provision of commercial sites and services in these areas.

b. Provide adequate community assembly, medical and recreational facilities in towns and rural areas.

c. Identify sites in collaboration with local municipalities to make provisions for strong and viable zones or land parcels where public assembly and compatible activities could be established.

h. Environment and Amenity

To promote sustainable environment in the region. The following environment programmes will be implemented in accordance with the framework of the IDP and relevant planning legislation:

a. To return, strengthen or add to features, structures and design elements which enhance beauty, attractiveness and overall amenity in the environment of the region.

b. Assist local municipalities in ensuring that relative proportions of physical development (e.g. buildings) are kept with desirable human scale.

c. In all areas in towns, we shall also assist municipalities in encouraging high standards of cleanliness and ensure regular and efficient cleaning up and removal of refuse.

d. Encourage in accordance with the MSA of 2000 and with all relevant enactments, on the creation, retention and proper maintenance of sites and structures of outstanding beauty and historic interest.

e. In keeping with the need to preserve buildings and other features of historic significance as mentioned earlier in this report, the municipality together with local municipalities take all measures possible to ensure proper conservation and nurturing of any natural or man-made features/ structures within the district in terms of relevant legislation. In particular, we shall put into effect measures for conservation of building of architectural significance as laid down in the historic buildings regulation.

f. Compile a register/ list of historic buildings/ sites which require to be conserved.

i. Environment impact assessment (EIA)

During the implementation of this IDP, we shall do everything within our power to ensure that no development shall be carried out within the boundaries of local plans unless an environmental impact assessment report has been made and submitted to and approved by the relevant local authority.

j. Tourism

- The development for tourism e.g. One-Stop centres along the N1 and N2 will be done way that the local population can benefit from employment such development is envisaged to generate. The proposed location of One - Stop centres is shown in the map below.

- A spatial framework plan for the Siyathemba Municipality will be prepared by the municipality in this financial year (2003/04). The plan will be used as a tool for protecting the totality of the environment and where appropriate, incorporate this with recreational, educational and cultural services to the public.

k. Industry and Agricultural

From the preceded status quo report of this plan, it is evident that industrial and agricultural sectors make a significant contribution to the local economy. In this respect, the municipal shall further promote these sectors through implementation of the following programmes:

a. Agriculture

- Upgrading and provision of infrastructure to make farms more accessible and stimulate the expected growth of this sector.

- To release more land for emerging farmers.

b. Industry

To encourage industrial investment in our region through maintenance and provision of infrastructure.

l. Railway

Rehabilitation of the existing railway stations is necessary for rationalisation, expansion and redevelopment of railway transportation facilities to adequately meet the present and medium to long term needs of this service.

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Spatial Dev. Framework

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1. INTRODUCTION

1.1 The Mandate

Municipalities are required to compile Spatial Development Frameworks (SDFs) as core components of their IDPs as prescribed by the Local Government: Municipal Systems Act, 200 (Act 32 of 2000). According to the Draft Land Use Management Bill (July 2001) all local municipalities within the area of the district municipality must align their SDF's in accordance with the framework of integrated development planning referred to in Section 27 of the Municipal Systems Act.

To act in accordance with the Municipal Systems Act and to fulfil its role in spatial planning, Pixley ka Seme District municipality appointed Africon in July 2006 to compile a Spatial Development Framework for the District and local municipalities.

1.2 The Role and Purpose of a SDF

The role and purpose of the SDF are:

1. to guide spatial planning, land development and land use management in the local municipal area, and
2. to give strategic direction in terms of investment in the local municipal area.

The purpose of this document is:

- To translate the SDF into a more detailed and geographically specific land use management tool.
- To consolidate, update and review existing spatial planning and development management mechanisms.
- To guide the preparation of more detailed local area plans, precinct plans and land use schemes.
- To provide a more concrete spatial and land use guideline policy for use by municipal and other infrastructure service providers in planning and delivering their services.
- To provide direction and guidance to private sector and community investors with respect to the levels, locations, types and forms of investment that need to be made, and that will be supported by the Local Municipality.

1.3 The Critical Elements of a Spatial Development Framework

The critical elements of a SDF should be a written document and a map(s) which indicate the following:

- Give effect to the principles contained in Chapter 1 of the Development Facilitation Act, 1995 (Act No 67 of 1995).
- Preferential and focus areas for certain types of land uses.
- The location of projects identified as part of the integrated development planning process.
- Reflect the spatial objectives and strategies contained in the IDP.
- Indicate the desired direction of urban expansion and the most appropriate use of vacant land where appropriate and desirable.
- A business plan for implementation of the spatial development framework.

In a rural context it will be necessary also to deal specifically with:

- natural resource management issues,
- land rights and tenure arrangements,
- land capability,
- subdivision and consolidation of farms, and
- the protection of prime agricultural land

The SDF is a legally binding document and should therefore be very specific and indicate the appropriate level of detail.

1.4 Legislation applicable to spatial planning

Government has adopted new legislation and policies, which allows for a more flexible, participative planning methodology. The key legislative and policy elements of this new approach to spatial planning are derived from:

- Section 26(e) of the **Municipal Systems Act**, 2000 (Act 32 of 2000)
- Chapter IV of the **Development Facilitation Act** (DFA) Act 67 of 1995
- Chapters 3 and 4 of the **Draft Land Use Management Bill** (July 2001)

- **The White Paper on Spatial Planning and Land Use Management**, March 2001
- **The Northern Cape Planning and Development Act**, Act 7 (Act 7 of 1998)
- **The Physical Planning Act**, Act 125 of 1991

Other legislation applicable to spatial planning:

- The Conservation of Agricultural Resources Act (Act 43 of 19830
- The Environment Conservation Act (No 73 of 1989)
- The National Environment Management Bio-Diversity Act (No 10 of 2004)
- The National Heritage Resources Act (No 25 of 1999)
- The National Environment Management Act (NEMA – No 107 of 1998)
- The National Water Act (No 36 of 1998)

1.5 Alignment with other development planning initiatives and strategies

- The National Spatial Development Perspective (NSDP – March 2003)
- The Northern Cape Provincial Growth and Development Strategy (PGDS – January 2005)
- The Provincial Spatial Development Strategy (PSDS)
- The Pixley ka Seme District Growth and Development Strategy (Draft - November 2006).
- The Pixley Ka Seme District Municipality IDP and SDF.
- The Siyathemba Municipal IDP.

1.6 The Process followed to compile this document

A set of maps, indicating the current state of the region, has been developed. A workshop was held on the 17th of November 2006 in De Aar. During the workshop potential development areas were identified by stakeholders and government departments and these were incorporated into the final plan.

The local municipality's standards, norms and values for management of the environmental resources and features were listed and displayed on maps of the area. Areas of high-risk for development activities were also indicated on the maps, therefore providing a guideline for development within the local municipal areas. The main spatial and land issues of each town were then indicated on a spatial development guideline map.

Finally the Spatial Development Framework of Siyathemba Municipality aim to focus on potential areas where development is most likely to occur. It therefore identifies development nodes and corridors which need to receive priority for future development.

2. GUIDING SPATIAL PLANNING AND DEVELOPMENT FOR SIYATHEMBA LOCAL MUNICIPALITY

This Chapter will focus on guiding spatial planning and development for the local municipality within the Pixley region.

1.7 Source of base information

The information and data used to compile this section were obtained from ENPAT2000, Enviro-Info 2001 that was developed by the Department of Environmental Affairs and Tourism.

1.8 Methodology

This guideline document can be used for development planning since it indicates the environment's potential for development.

The local municipality's standards, norms and values for the management of environmental resources and features are listed and displayed by the map of the area. Pre-conditions or limitations are defined for development activities that may have potential harmful impacts on the environment. Examples of impacts are: destruction of geological

formations due to mining, reduction in water quality due to agricultural fertilisation, or transformation of grassland biome due to overgrazing.

High-risk developments for a particular feature are also indicated. Examples of high-risk developments and the associated impacts may be: high-density residential development in a wetland area which is likely to destroy the wetland, informal industrial development on degraded land that may cause additional erosion, and feedlots near a stream corridor that may reduce water quality downstream.

1.9 Development impacts on the environment of various development activities

The type of development activities hereby listed and the impact thereof on the environment can be used as a guideline for all the towns in the Pixley ka Seme district.

A. RESIDENTIAL

Formal Residential

Type:

- Low density (plot sizes > 1500m2),
- Formal, normal density (plot sizes 500m2 - 1500m2),
- Formal, medium density (shared plots, single & double storey),
- High density (multi storey units in complex)

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Scenic impact.
- Pollution of air.
- Flooding may occur in floodplains due to construction being too close to the stream or river edge.
- Water quality most adversely influenced by organic and microbiological pollution due to human activities.
- Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

Informal Residential

Type:

- Low density urban,
- Informal, high density urban,
- Informal, low density rural,
- Informal, high density rural

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Scenic impact.
- Depletion and degradation of soils may lead to unproductive soils.
- Decrease of water infiltration and increase the water run-off (flood potential).
- Pollution of air.
- Flooding may occur in floodplains.
- Water quality most adversely influenced by organic and microbiological pollution due to human activities.
- Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

B. BUSINESS

Commercial

Type:

- Free Trade Zones.
- Trade Zones.
- Shopping Centres.
- CBD
- Commercial Grain Silos

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Scenic impact.
- Pollution of air.
- Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

Fuel Stations

Type:

- Petrol/Diesel Filling Stations,
- Fuel Storage Facilities,
- Fuel Refineries,

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- These materials may be toxic to fauna and flora and may also induce genetic changes between generations. May lead to pollution caused by emission of by-products.
- Pollution of air.
- The possibility of leakage/ spillage may pollute the soil, surface and groundwater.

Advertisement

Type:

- All advertisement.
- Posters and other general signs.
- Signs on buildings, structures and premises.
- Signs for the tourist and traveler.
- Mobile signs,
- Billboards and other high impact free standing structures

Type:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Scenic impact.

C. TRANSPORT

Parking, Related Structures & Facilities

Type:

- Parking lot,
- Taxi rank,
- Bus or heavy vehicle depot,
- Filling station,
- Vehicle service facility,
- Traffic control centre,
- Dirt road with high traffic loads,
- Dirt road with low traffic loads.

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Roads and other tourism related structures may cause fragmentation of large populations (especially of cryptic animals) and behavioural changes induced by tourism activity.
- May lead to pollution caused by emission of by-products.
- Pollution of air.

Airports

Public and private landing strips.

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Cause increase mortality in birds of prey if incorrectly designed. Scenic impact. May lead to pollution caused by emission of by-products.
- Pollution of air. The possibility of leakage/ spillage may pollute the soil, surface and groundwater.
- Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

D. AGRICULTURE/FARMING

Crop Farming Agriculture

Type:

- Irrigated agriculture (all farm sizes),
- Mono-culture agriculture, large (more than 1000ha),
- Mono-culture agriculture, medium (250ha - 1000ha),
- Mono-culture agriculture, small (less than 250ha),
- Mono-culture agriculture, subsistence. Rain-fed crops.

Mixed Agriculture

Type:

- Mixed agriculture (livestock & crops),
- large (more than 1000ha),
- medium (250ha - 1000ha),
- small (less than 250ha),
- subsistence,
- Communal Grazing system

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Non-selective overgrazing and trampling causes the replacement of late successional grasses with less nutritional, early pioneer grasses, the loss of herbaceous annuals, exposure of bare soil and subsequent erosion.
- Area is homogenised and ecosystem functioning on cultivated land is essentially simplified to production of bio-mass.
- Depletion and degradation of soils may lead to unproductive soils.

Animal Husbandry

Type:

- Cattle farming,
- Cattle, large (more than 1000ha),
- Cattle, medium (250ha - 1000ha),
- Cattle, small (less than 250ha),
- Cattle, high density feeding lots,
- Dairy Farming,
- Poultry farming,
- Ostrich farm,
- Sheep farming,
- Sheep large (more than 1000ha),
- Sheep medium (250ha - 1000ha),
- Sheep small (less than 250ha)
- Pig farm,
- Crocodile farm,
- All goats farming and Mixed grazing /browsers (goats, sheep &/or cattle).

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Non-selective overgrazing and trampling causes the replacement of late successional grasses with less nutritional, early pioneer grasses, the loss of herbaceous annuals, exposure of bare soil and subsequent erosion.
- High density cattle farming leads to total destruction of indigenous vegetation that may result in subsequent erosion. The deposition of abnormal amounts of manure increase soil acidity and prohibits recovery of indigenous species for prolonged periods.
- Water quality most adversely influenced by organic and microbiological pollution due to animal wastes or activities.

Forestry

Type:

- Large scale forestry,
- Small scale commercial forestry (less than 10ha),
- Subsistence forestry (firewood etc.)

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Scenic impact. Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

Aquaculture

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species. Area is homogenised and ecosystem functioning on cultivated land is essentially simplified to production of bio-mass.
- Water quality most adversely influenced by either organic and microbiological wastes due to the raising of animals or the use of inorganic fertilisers or pesticides during the cultivation of crops.

Nurseries

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Area is homogenised and ecosystem functioning on cultivated land is essentially simplified to production of bio-mass.
- Depletion and degradation of soils may lead to unproductive soils.
- Water quality most adversely influenced by either organic and microbiological wastes due to the raising of animals or the use of inorganic fertilisers or pesticides during the cultivation of crops.

E. TOURISM

Game & Hunting Lodges

Type:

- Game & hunting lodges,
- Eco-lodge (low impact facilities in a natural environment)

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Selective hunting of target species alters genetic constitution of natural populations; non-target species may be affected by management practices that favour increased population numbers of charismatic and hunted species.
- Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned.
- Scenic impact.

Game Farming

Type:

- Game farming, large (more than 4000ha),
- Game, medium (600ha - 1000ha),
- Game, small (less than 600ha)

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Selective hunting of target species alters genetic constitution of natural populations; non-target species may be affected by management practices that favour increased population numbers of charismatic and hunted species.
- Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned.

Leisure & Tourism

Type:

- Hotel - large (more than 100 rooms),
- Hotel - medium (30 - 100 rooms),
- Hotel - small (less than 30 rooms),
- Guest house,
- Resort - detached units in a rural or natural setting outside urban areas,
- Caravan Park / Site,
- Casino,
- Golf Course

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned.

Conservation

Type:

- All conservation area,
- National park,
- Provincial nature reserve,
- Regulated natural area,
- Natural heritage site,
- National monument,
- Local authority conservation area,
- Private nature reserve,
- Urban open space area.

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned.

F. INDUSTRIAL

Industrial

Type:

- Heavy industrial - metal smelting, chemical processing, assembly plants, other,
- Medium industrial - chemical processing, other,
- Light industrial,
- Workshop,
- Agricultural processing plants on agricultural land.

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences
- Cause increase mortality in birds of prey if incorrectly designed.
- Scenic impact.
- These materials may be toxic to fauna and flora and may also induce genetic changes between generations. May lead to pollution caused by emission of by-products.
- Pollution of air.
- The possibility of leakage/ spillage may pollute the soil, surface and groundwater.

- Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

Hazardous Materials handling, and manufacturing

Type:

- Hazardous materials transportation route,
- Hazardous materials handling facility,
- Hazardous materials processing facility,
- Hazardous materials storage facility,
- Hazardous materials manufacturing facility

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Radioactive elements are carcinogenic and cause genetic mutations between generations. May lead to pollution caused by emission of by-products.
- Pollution of air.
- The possibility of leakage/ spillage may pollute the soil, surface and groundwater.
- Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

G. MINING

Mining

Type:

- Open cast mine,
- Open cast mine with drag line,
- Underground mine,
- Sand works,
- Clay quarry associated with brickworks,
- Other clay quarries,
- Gravel quarry for road fill,
- Rock quarry for construction aggregate,
- Rock quarry for blocks or slabs of rock,
- Salt works

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Exposure of bare rock and soil causing erosion and microclimatic changes that adversely affects re-colonisation.
- Scenic impact.
- May lead to pollution caused by emission of by-products.
- Pollution of air.
- Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.

H. INFRASTRUCTURE

Pipelines, Cable Networks

Type:

- Pipeline for the transportation of hazardous substances including petroleum products,
- Water bulk supply pipelines,
- Cable networks,
- Telephone lines and associated structures,
- Industrial cable way and associated structures,
- Tourism cable way and associated structures

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water.
- Scenic impact.

Power Stations Alternative Power

Type:

- Electricity generation facilities,
- Coal powered stations,
- Hydro electricity generators,
- Wind electricity generators (commercial only),
- Bio-electricity generators (commercial only)

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.

- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Scenic impact. May lead to pollution caused by emission of by-products.
- Pollution of air

Railways, Related Structures & Facilities

Type:

- Railway structures,
- Railway lines,
- Stations,
- Shunt yards & workshops,
- Railway bridges

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Roads and other tourism related structures may cause fragmentation of large populations (especially of cryptic animals) and behavioural changes induced by tourism activity.
- Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water.
- Scenic impact.
- May lead to pollution caused by emission of by-products.
- Pollution of air

Roads

Type:

- Roads,
- Double carriageway highway,
- Tarred road with 120km/h speed limit,
- Tarred road with 80km/h speed limit,
- Tarred roads with speed limits below 80km/h

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences.
- Roads and other tourism related structures may cause fragmentation of large populations (especially of cryptic animals) and behavioural changes induced by tourism activity.
- Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water.
- Scenic impact.
- May lead to pollution caused by emission of by-products.
- Pollution of air

Towers and masts, Conveyors

Type:

- Microwave towers (telecommunications),
- Radio transmission towers and masts,
- Cellular phone network masts,
- Wireless loop telecommunication masts,
- Radar masts,
- Reception dishes and structures,
- Industrial conveyor - long distance (>1km),
- Industrial conveyor - short distance (<1km),
- Industrial conveyor - on site

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Cause increase mortality in birds of prey if incorrectly designed.
- Scenic impact.

Trails

Type:

- 4x4Trail,
- Motorbike Trail,
- Equestrian Trail,
- Hiking Trail

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned.
- Scenic impact.

Waste sites, Sewage treatment

Type:

- Household waste landfill,
- Class 2 waste landfill,
- Class 1 waste landfill,
- Waste indicator,
- Radioactive waste site,
- Sewage disposal structures,
- Sewage treatment plants,
- Sewage pipelines (MAIN)

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water.
- These materials may be toxic to fauna and flora and may also induce genetic changes between generations.
- May lead to pollution caused by emission of by-products.
- Pollution of air.
- The possibility of leakage/ spillage may pollute the soil, surface and groundwater.

Water storage

Type:

- Water storage and supply structures as well as structures affecting the flow of water in rivers,
- Bulk water supply/storage dam,
- Farm dam,
- Inter catchments water transfer scheme,
- Reservoirs for public water supply,
- Levees,
- Weirs

Impact:

- Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species.
- Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water.
- Scenic impact.

1.10 Guidelines for settlement planning and design

1.10.1 Guideline planning for residential development

For settlements to be flexible over time, the layout must be able to accommodate mixed and changing land uses. it is necessary to plan for future/expected developments that will impact on the settlement like a major urban centre or railway station.

When undertaking land subdivision one needs to provide a certain number of larger erven to accommodate various public facilities.

To enhance the land and energy resource efficiency of a layout the following design factors should be considered:

- Maximize the number of solar-oriented lots,
- Maximize the number of lots,
- Minimize the slope of roadways and lots, and
- Minimize total costs of on-site infrastructure.

Block size

- In areas of low car ownership, fairly short blocks of approximately 100m in length are most appropriate.
- Intervals of between 30 to 40m are necessary, in order to provide for adequate driver visibility and safe clearance.

Land utilization

In order to assess the efficiency of land utilization within the proposed block subdivision, Behrens and Watson (1996) have identified the following methods to access layout efficiency:

- **Network length: area ratio.**
  This ratio measures the length of road network in relation to the area served.

In general, the lower the value of the ratio the more efficient the network.
A suggested target is 150-230m/ha.

- **Network length: dwelling unit ration.**
  This ratio measures the length of road network relative to the number of dwellings within a given area. In general, the lower the value of the ratio the more efficient the network.
  The suggested target value is 5-10m/du.

- **Frontage: depth ration.**
  This ratio measures the width of an erf relative to length. In general, the greater the ratio (i.e. the shorter the erf frontage) the more efficient the layout. Narrower erf frontages and reducing plot sizes effectively reduces the network length per erf and increases erf densities.
  Suggested target value is between 1:5 and1:3.

- **Residential density.**
  Appropriate densities are specific to a range of social, economic and environmental factors.
  A gross density of over 50 du/ha is likely to be appropriate in most developing urban areas of SA.
  According to the Department of Housing and Local Government a minimum erf size for residential development was determined as **240m²**.[1]

- **Land utilization index.**
  The index, or land use budget, identifies the proportional use of land. Land uses are conventionally broken down in to residential, commercial, industrial, public facilities, public amenities and movement. Appropriate proportions of land uses, particularly commercial, industrial and public amenity uses, are context specific.
  As a rule of thumb, at the local area layout scale, residential, commercial and industrial uses should take up ± 55% of land, public facilities and amenities ± 25%, and movement less than 20%.

1.10.2 Guideline planning for public facilities

Public facilities are defined as those basic services which cannot be supplied directly to the individual dwelling unit and as a result are utilised away from the individual residential dwelling unit within the public environment.

Public facilities satisfy specific individual or community needs - including safety and security, communication, recreation, sport, education, health, public administration, religious, cultural and social. Public facilities, as the name implies, are generally regarded as the responsibility of government, whether central, regional or local, and more often than not are provided by government institutions. However, public facilities are also provided privately, when the government-provided services are perceived to be inadequate.

When planning for public facilities for residential settlements it is necessary to analyse the site and target population in order to determine the type of public facilities required for a specific development.

In order to determine what facilities are required by the target community, one need to evaluate what facilities exist in the surrounding areas, whether these facilities are operating at full capacity, and whether they will be adequate to serve the needs of the proposed new living environment.

It is necessary to have a complete profile of the population for which the public facilities are intended, in order to determine what facilities that community requires. An incomplete population profile can result in facilities which are inappropriate (i.e. the provision of a crèche in an area where the population is ageing).
One needs to determine the following:

- Age and gender profile (gender ratios, household age structure and size).
- One needs to determine what age group and gender one will be serving, in order to determine what types of facility will be required (i.e. an ageing population will require access to health facilities, as opposed to educational facilities).
- Income profile (household expenditure and income).
- The level of public facility provided.

- Community priorities.

1.10.3 Quantitative guidelines – SOFT OPEN SPACES

Parks

- Location:
  Larger parks should be located in areas with no or limited access to natural amenities. They should be fairly evenly distributed throughout a settlement, and where possible, connected by parkways.
  Smaller parks can be located within easy walking distance (i.e. ±300m) of workers situated within busy commercial and industrial centres in order to create contrasting spaces of relief within predominantly residential areas, so as to create easily surveilled child-play spaces, and within school clusters, which create safe, shared playtime spaces.
- Access:
  As smaller parks are likely to be used on a daily basis by children, elderly people and workers, and are accessed by foot, they should be located within 300 m to 700 m of users. The maximum time spent walking to a smaller park should therefore be approximately 10min.
- Size and Dimensions:
  The area and dimensions of smaller parks also vary according to the functions they are intended to perform. Smaller parks should, however, be small enough to maintain a sense of intimacy, and enable easy visibility and recognition (i.e. 25m maximum). Such parks should therefore be between 450m² and 1 000m² in size, with widths of between 15m and 25m, and lengths of between 30m and 40m.

Sport fields

- Location:
  Larger competitive sportsfields should be located within clusters of schools and close to private sports clubs, in order to facilitate the sharing of amenities between different user groups and to avoid under-utilisation. Schools can have allocated times of use during the day, while sports clubs can use the amenities mainly during the evening.
  Competitive sportsfields should be located close to public transport services, in order to facilitate the access of visiting teams.
- Access:
  Sportsfields can be located on low-lying land adjacent to water courses and incorporated into parkways, in order to act as part of the major stormwater management system in the event of severe storms.
  School sportsfields should be located within easy walking distance (i.e. ± 300m) of school buildings - with primary schools requiring closer locations than secondary schools, and should be located within 500m to 1 500m of other user groups (e.g. sports clubs).

Play spaces

- Location:
  Wherever possible, playspaces should be incorporated with other public open spaces (for reasons of multifunctionality).
  Playspaces can be located within clusters of primary schools and close to pre-school and day-care facilities, in order to facilitate the shared use of these amenities as safe and stimulating play-time areas.
  Playspaces can be located within parks, relatively close to entrance points (but away from busy perimeter roads) and traversing pathways, so that they are areas of greatest public surveillance and safety.
- Access:
  Playspaces should be located within easy walking distance (i.e. ±300m) of primary school buildings and crèches, and should be located within 500m to 1 500m of other users. As playspaces sometimes serve children from surroundings areas, maximum distances will occasionally be greater than maximum walking distances (i.e. ±500m or 10min.).
- Size and Dimensions:
  The area and dimensions of a playspace vary according to the nature of the play equipment (e.g. whether or not small animals are kept within the space), and whether or not the playspace is part of a larger soft

open space. Playspaces should however be small enough to enable easy supervision and recognition (i.e. ±25m maximum). Playspaces should therefore be between 450m² and 1 000 m² in size, with widths of between 15m and 25m, and lengths of between 30m and 40m.
It should be kept in mind that the size and surface of playspaces could have an impact on their use, especially in areas where sufficient resources are not available to keep them in a state conducive to play activities. The result could be that smaller play spaces are used for rubbish dumping, parking, etc. It might prove to be more suitable in some instances to develop these as hard open spaces to allow for various games requiring a hard surface.

1.10.4 Quantitative guidelines – EDUCATIONAL FACILITIES

Crèches

- Location:
  These are community-specific facilities which should be within walking distance of residential units.
  Facilities can be clustered with pre-primary schools, primary schools, community centres, etc. (This does, however, result in the externalisation of facilities beyond individual residential settlements).
- Access:
  Should be accessible by pedestrian pathways without having to cross major streets.
  Where streets are crossed these should be minor streets.
  Maximum travel time: 10 minutes (whether by foot or vehicle).
  A maximum walking distance of 750m.
- Size and Dimensions:
  Minimum size for facility: 130m²
  50m² per 45 children served.
  Minimum area per playlot: 20 - 30m².
  One third of the total area should be used for circulation, administrative and ancillary uses.
- Use capacities and thresholds
  Estimated minimum population: 5 000.

Primary school

- Location
  Should be located within easy reach of the local areas which it is intended to serve. As a result it needs to be located close to, but not necessarily along, a public transport route.
  Primary schools can be combined with a number of other facilities to form a cluster (i.e. a high school, community hall, playground, park, etc.)
- Access
  Should ideally be accessible by foot, bicycle and vehicle.
  Maximum travel time: 20min (whether by foot, bicycle or by vehicle).
  Maximum walking distance: 1.5km
- Size and Dimensions
  The minimum size of a primary school site is estimated at 2.4ha (Buildings: 1.4ha, Recreational space: 1ha)
- Use capacities and thresholds
  Estimated minimum population: 3000 – 4000.

High School

- Location
  Situated on a major transport route with public transport stops.
- Access
  Maximum travel time: 30minutes
  Maximum walking distance: 2.25km
- Size and Dimensions:
  Minimum size of a high school is ±4.6ha (Buildings: 2.6ha, Recreational space: 2ha)
- Use capacities and thresholds
  Estimated minimum population: 6 000 – 10 000.

Tertiary facilities & Adult learning centres

- Location
  Regional facilities located along major transport route with public transport stops.
  Regional scale of facility means that it would be planned for in terms of a development framework and not when designing specific living environments.

1.10.5 Quantitative guidelines – HEALTH FACILITIES

Mobile clinic

- Location
  Mobile facilities which move from community to community, therefore no fixed location.
- Access
  Must be accessible by foot.
  Maximum walking distance: 1km
- Size and Dimensions:
  These are self contained units. Space is, however, required to park and operate the clinic: this can be done form a local park, community centre, church, etc.
- Use capacities and thresholds
  Population: 5 000.

Clinic

- Location
  Should be accessible to the greatest number of people and as such should be located close to public transport stops.
  The facility needs to be located along a major route.
- Access
  Minimum walking distance: 2km
  Where not possible for the facility to be placed within walking distance, it must be easily reached via public transport, with a maximum walk of 5 minutes from the public transport stop to the facility.
  Maximum travel time of 30 minutes.
- Size and Dimensions:
  Size of the clinic will depend on the number of people served.
  The following guidelines are suggested: 0.1 ha per 5 000 people, 0.2 ha per 10 000 people, 0.5 ha per 20 000 people, 1 ha per 40 000 people, 1.5 ha per 60 – 80 000 people.
- Use capacities and thresholds
  Estimated minimum of 5 000 people.

Hospitals

- Location
  Regional facilities located along major transport routes in close proximity to public transport stops.
  Regional scale of facility means that it would be planned for in terms of a development framework and not when designing specific living environments.

1.10.6 Quantitative guidelines – CULTURAL FACILITIES

Libraries

- Location
  Should be easily accessible, preferably on main traffic and transportation routes.
  Libraries can be combined with a number of other facilities to form a convenient cluster, i.e. schools, community centres, etc.
- Access
  Should be within walking distance: 1.5 km – 2.25 km
  Or within 5 minutes walking distance of a public transport stop: maximum travel time 20 – 30 minutes.
- Size and Dimensions:
  Size of library will depend upon the population being served.
  Suggested minimum size: 130m².
- Use capacities and thresholds
  Can serve populations of 5 000 to 50 000.

Community centres

- Location
  A community centre provides a variety of services to a number of residential communities, as such, it should be easily accessible to these communities, preferably on a main thoroughfare in close proximity to public transport stops.
- Access
  Should be within walking distance: 1.5 km – 2.25 km
  Or within 5 minutes walking distance of a public transport stop: maximum travel time 20 – 30 minutes.
- Size and Dimensions:
  Estimated minimum size: 5 000m².
- Use capacities and thresholds
  A minimum population of about 10 000 people.

Religious centres (churches)

- Location
  The location will depend on the community being served and the

existing facilities in the area surrounding the site.

- Access
  Should be within walking distance: 1.5 km
  Maximum travel time by foot or public transport or vehicle: 20 minutes.
- Size and Dimensions:
  There is no common uniform agreement as to the adequate size of a church site.
  The size can therefore range from 150m² to 3 000 m².
- Use capacities and thresholds
  It is estimated that approximately 2 000 people are required to support a single church.

Cemeteries

- Location
  Cemeteries are not considered as a land use which is compatible with residential land use and, as a result, they are not dealt with in the Guideline for Human Settlement Planning and Design (the Red Book).
  However, the location of a cemetery will depend on the availability of vacant land, geology of the areas, the hydrogeology and the topography of the area.
  It is important to zone a suitable area for a cemetery, thereby ensuring that the site is complying with geotechnical, water and environmental regulations.
- Access
  Maximum travel time by foot or public transport or vehicle: 15 - 60 minutes.
- Size and Dimensions:
  The calculations for determining the size of the cemetery can be based on the formula developed by the former RGN, CSIR, the private sector and the University of Potchefstroom (North West University) and University of Pretoria.
  This formula takes the following into account: The total population of the town/area that the cemetery is planned for calculated over a realistic time period and for which the growth rate is known.

Magistrate's court

- This is a provincial facility and courts are planned and provided for by the provincial administration.

Municipal offices/pay points

- Location
  These facilities require high levels of exposure and must be easily accessible b public transport.
- Access
  Should be accessible by public transport.
  Maximum travel time: 30 minutes.
- Size and Dimensions:
  The minimum size for municipal offices is 3 000 m².
- Use capacities and thresholds
  A minimum population of 50 000 people.

Post offices

- Location
  Should be located along activity routes within easy walking distance of public transport stops.
- Access
  Where possible, communities should be able to access the port office on foot.
  The maximum travel time per foot/vehicle: 30 – 40 minutes.
- Size and Dimensions:
  The minimum recommended size is 500m².
- Use capacities and thresholds
  Estimated minimum population: 11 000 people.

Police stations

- Location
  Community police stations should be located central to all the communities which they are required to serve and should be on a main thoroughfare, so that emergency vehicles can be easily dispatched to adjoining communities.
- Access
  Should be within walking distance: 1.5 km
  Maximum travel time: 20 minutes.
- Size and Dimensions:
  Varies between 0,1ha – 1ha, depending on the type of facility provided.
- Use capacities and thresholds
  Estimated minimum population: 25 000.

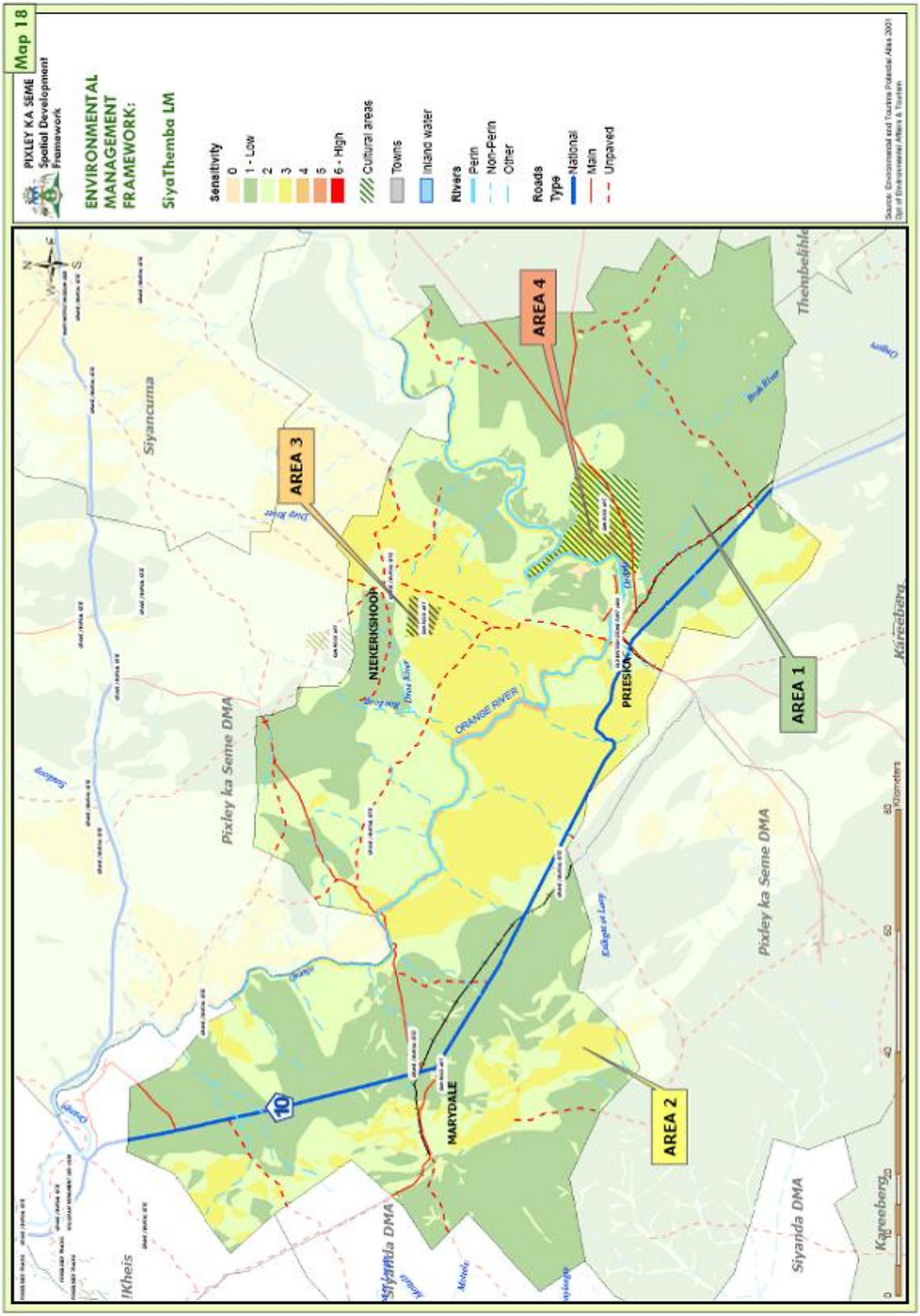
Old age homes

- Are generally provided by the private sector, based on need and demand.

Fire stations

- Location
  Fire stations distribute emergency vehicles to the area and as a result, they should be located on higher-order multifunctional routes that intersect with primary or regional distributors.
- Size and Dimensions:
  Average erf size: 1,2ha.
- Use capacities and thresholds
  Estimated minimum population: 60 000

Map 1 - Siyathemba Local Municipality



1.10.7 Environmental management framework (EMF) for the SiyaThemba Local Municipal Area

EMF applicable to **AREA 1** indicated on Map 1.

Acocks Veld Types : ORANGE RIVER BROKEN VELD

1) Vegetation management.

- Vegetation clearing must be avoided under all circumstances. Where unavoidable, measures must be implemented to avoid loss of topsoil through uncontrolled run-off.
- Grazing must be managed to ensure maximum yield of flowering plants.
- Ploughing must be managed to ensure the minimum disturbance to the grass biome.
- Fire management plans must be completed and approved by the relevant provincial conservation authority before the development / activity may proceed.
- Off-road vehicles should be restricted to low impact tolerant areas.
- The clearing of grassland for the production of monoculture crops (including commercial tree plantations) should be prohibited unless the relevant provincial nature conservation authority approves an environmental impact assessment and prescribe appropriate and effective mitigation measures that may also include compensative investment.

Geology : TILLITE

1) Geology - Stability.

- Geological stability for structures must be assessed and the results must be incorporated in design solutions.

Land Cover : SHRUBLAND / FYNBOS

1) Key Vegetation Community e.g. Fynbos.

- The introduction of the Argentine Ant (destroy fynbos seeds) must be prevented through the introduction of approved and effective measures.
- The rehabilitation and self-regeneration potential of the vegetation is low.
- Disturbance must be restricted to the absolute minimum. Key vegetation community.
- The area contains a key vegetation community with special value for bio-diversity and nature conservation.
- Adopt appropriate and effective preventative and/or mitigation measures.

Land Use : VACANT / UNSPECIFIED

1) Heritage - Bio-physical Conservation, Botanical Gardens, Natural Features, or private game reserves.

- The area must be managed in a way that retains or improves the ecological functions.
- Natural habitat corridors and streams must be maintained to ensure the natural function of these resources, and stream corridors must not be channeled.
- The impact of the development on landscape elements, such as bird watching areas, natural features, cultural features, distinctive landscapes, etc which have value for tourism must be assessed and effective preventative and mitigation measures must be adopted.
- Urban open spaces must be developed and maintained for the benefit of the local residents, visitors, and especially the local wildlife, such as bird populations, small mammals, etc.

Slope Analysis : 0 - 9%

1) Slopes.

- No development should be allowed on slopes that exceed the ability of the geology and the soils to retain its structure and the development upon it.
- Ridges and cliffs are of scenic value and the aesthetic quality to these must be maintained.

Soil Description : Glenrosa and/or Mispah forms (other soils may occur), lime generally present.

1) Water Quality.

- Soil erosion is caused mainly during rain storms due to a lack of vegetation cover.
- A management plan for storm water and on site pollution control must be compiled and implemented to acceptable ecological standards, and to the satisfaction of the relevant provincial authority or the local authority.
- Water runoff from barren ground, roads, paving areas, and built structures must be properly managed to prevent soil erosion and water pollution.

2) Soils.

- Effective measures to prevent wind erosion of soil must be adopted.
- Erosion removes the topsoil and in severe cases the subsoil of an area where uncontrolled and concentrated water flows over areas devoid of vegetation.
- To prevent erosion, ensure that a vegetation cover is maintained on the area.
- Once erosion has started, stop it by installing gabions or other methods to break the velocity of the water and dissipate the stream into smaller streams.
- Erosion and the loss of topsoil due to wind are detrimental process and must be avoided by retaining a vegetation cover on the land.
- The nature of the soil requires specialist assessment to determine appropriate construction guidelines in respect of foundations and other structural elements that may be affected by the soil.

EMF applicable to **AREA 2** indicated on Map 1.

Acocks Veld Types : ARID KAROO AND DESERT FALSE GRASSVELD

1) Vegetation management.

- Vegetation clearing must be avoided under all circumstances. Where unavoidable, measures must be implemented to avoid loss of topsoil through uncontrolled run-off.
- Grazing must be managed to ensure maximum yield of flowering plants.
- Ploughing must be managed to ensure the minimum disturbance to the grass biome.
- Fire management plans must be completed and approved by the relevant provincial conservation authority before the development / activity may proceed.
- Off-road vehicles should be restricted to low impact tolerant areas.
- The clearing of grassland for the production of monoculture crops (including commercial tree plantations) should be prohibited unless the relevant provincial nature conservation authority approves an environmental impact assessment and prescribe appropriate and effective mitigation measures that may also include compensative investment.

Geology : TILLITE

Land Cover : SHRUBLAND / FYNBOS

Land Use : VACANT / UNSPECIFIED

Slope Analysis : 0 - 9%

EMF applicable to **AREA 3 & 4** indicated on Map 1.

Cultural Sites : SAN ROCK ART

1) Heritage - Cultural.

- The impact of the development on the landscape elements which are important for culture orientated tourism must be assessed and effective preventative and mitigation measures must be adopted.
- Heritage sites, such as Bushman rock paintings, must be managed according to the South African Heritage Resource Agency's guidelines.
- Other structures such as bridges, buildings, museums, natural features, and other culturally significant features, must be managed in a sustainable manner.

1.10.8 Spatial Overview of the towns in the SiyaThemba Local Municipality

MARYDALE

The main spatial and/or land issues influencing the future spatial patterns and development of the town include:

- Marydale is identified as a **rural service centres** that will complement the satellite towns in the remote areas for the purpose of the even distribution of services and to promote the creation of employment opportunities;
- Lack of recreational facilities and infrastructure;
- The shortage of especially lower income housing units;
- Access to land by emerging farmers;
- More direct benefit from the major transport route (N10);
- Gravel and some tarred roads in the townships are in a poor condition and need to be upgraded;
- Densification, redevelopment or infill planning of residential areas between Zwelitsha and Marydale town;
- Inadequate public transportation system;
- Provision of sites for businesses, social services and open space areas;
- Formalisation of land and the securing of tenure;
- Lack of capacity at local municipal level; and
- Sustainable management of land.

TOURISM
Existing Activities and Attractions:

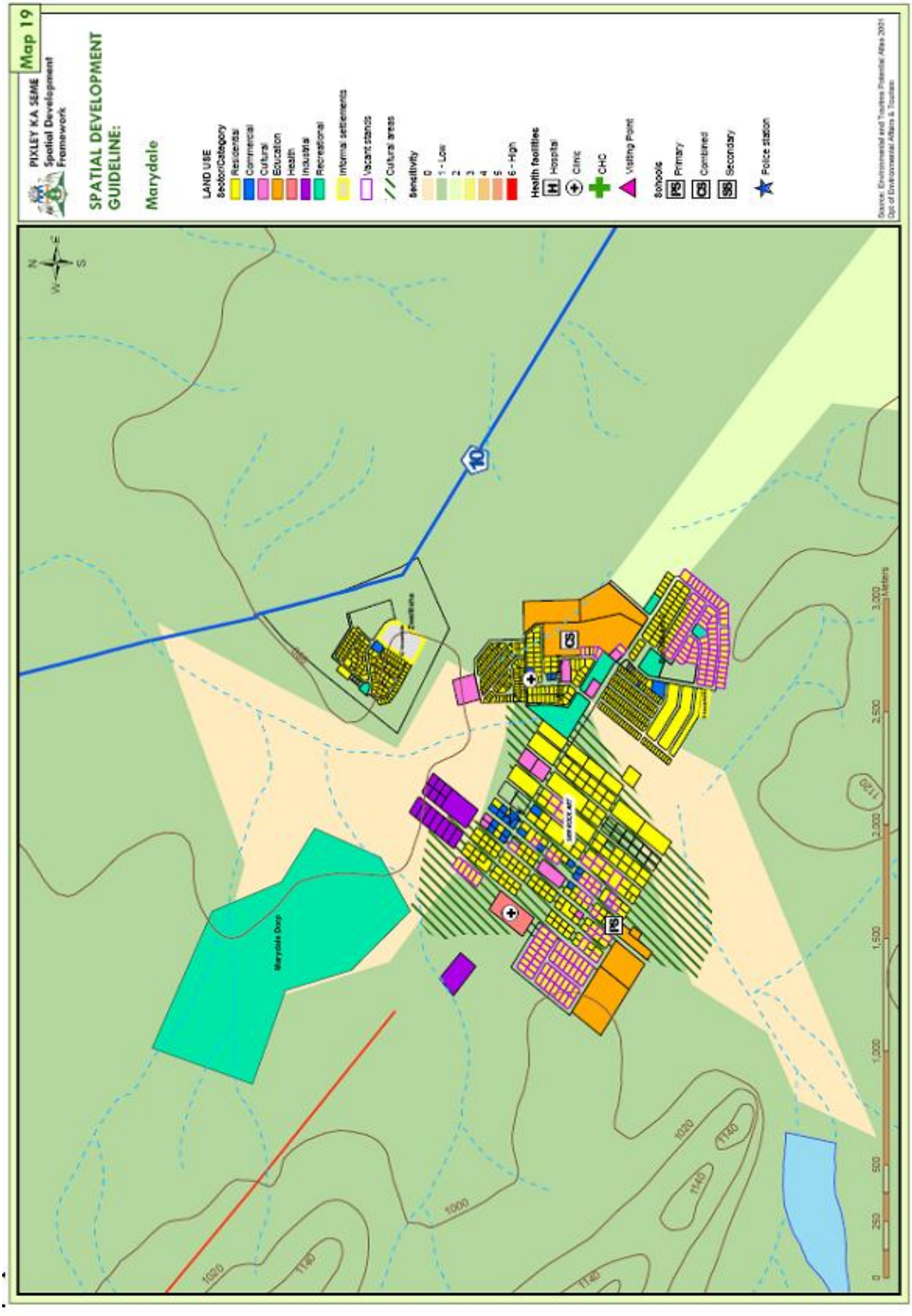
- Boegoeberg dam
- Kokerboom Forest

1.10.9 Proposed Development Projects/Initiatives

HOUSING

- Siyathemba needs an additional 33ha of land for new housing (±5ha for Marydale) [2].

Map 2 – Spatial Development Guidelines for Marydale



NIEKERKSHOOP

The main spatial and/or land issues influencing the future spatial patterns and development of the town include:

- Niekerkshoop is identified as a **rural service centres** that will complement the satellite towns in the remote areas for the purpose of the even distribution of services and to promote the creation of employment opportunities;
- Lack of recreational facilities and infrastructure;
- The shortage of especially lower income housing units;
- Access to land by emerging farmers;
- Gravel and some tarred roads in the townships are in a poor condition and need to be upgraded;
- Densification, redevelopment or infill planning of residential areas;
- Inadequate public transportation system;
- Provision of sites for businesses, social services and open space areas;
- Formalisation of land and the securing of tenure;
- Lack of capacity at local municipal level; and
- Sustainable management of land.

WATER AND SANITATION

- Except for the water deficiency, occurrence of pollution has been found in the groundwater.
- Water shortage is experienced.

1.10.10 Proposed Development Projects/Initiatives

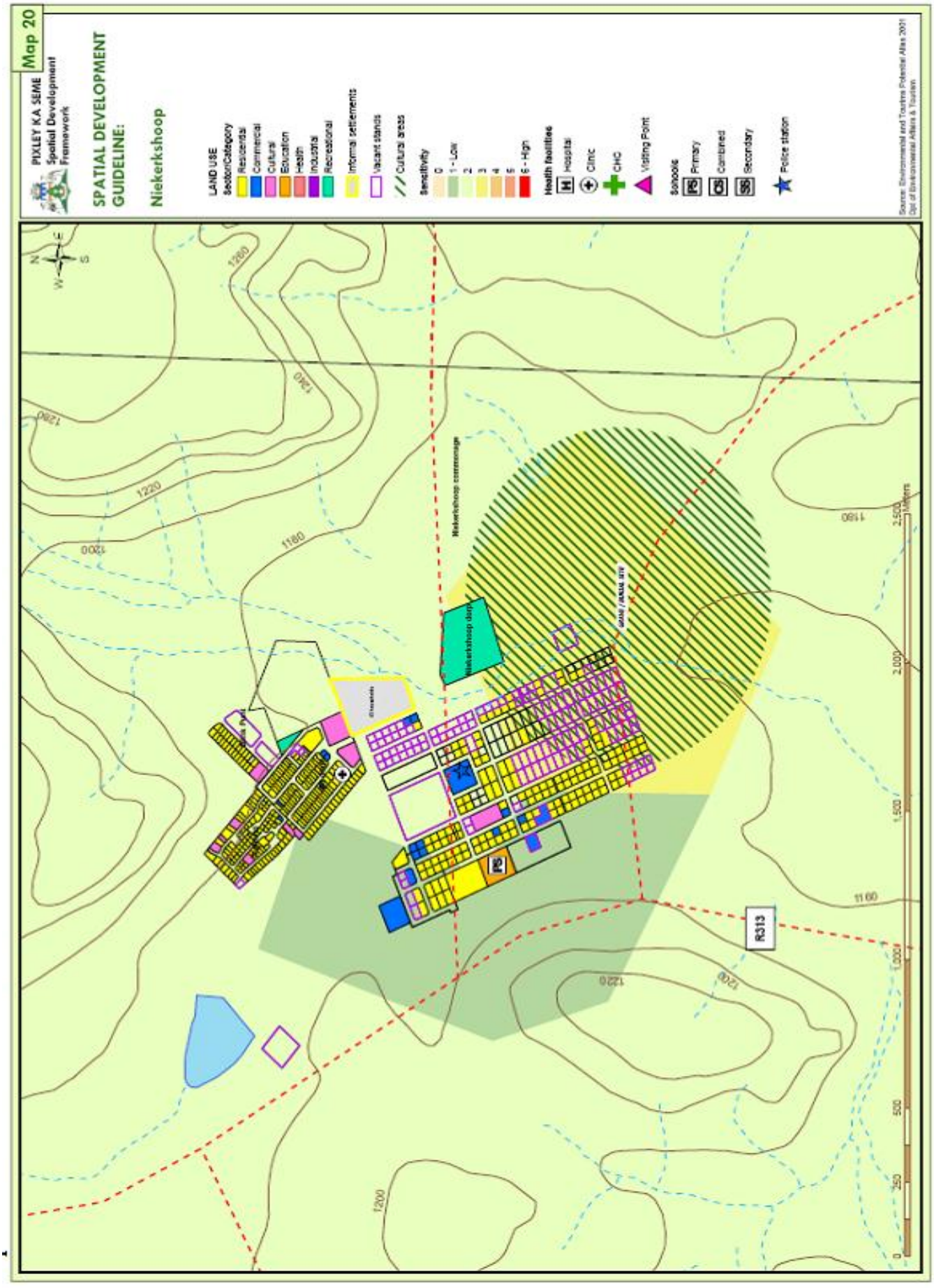
WATER AND SANITATION

- A feasibility study to address the water shortage in Niekerkshoop.

HOUSING

- Siyathemba needs an additional 33ha of land for new housing (±5ha for Niekerkshoop).

Map 3 - Spatial Development Guidelines for Niekerkshoop



PRIESKA

The main spatial and/or land issues influencing the future spatial patterns and development of the town include:

- Prieska is identified as an **Urban Centre** and should not only be further developed as administrative centres, but should also be promoted through the implementation of urban rehabilitation programmes to stimulate economic growth;
- Mining potential in tigers eye;
- Closing of the Copperton Mine;
- Tourism potential;
- The re-development and Expansion of the Die Bos Resort in Prieska;
- Lack of recreational facilities and infrastructure;
- The shortage of especially lower income housing units;
- Access to land by emerging farmers;
- Gravel and some tarred roads in the townships are in a poor condition and need to be upgraded;
- Inadequate public transportation system;
- Provision of sites for businesses, social services and open space areas;
- Formalisation of land and the securing of tenure;
- Lack of capacity at local municipal level; and
- Sustainable management of land.

TOURISM

Existing Activities and Attractions:

- Die Bos Nature Reserve. Indigenous trees, shrubs and abundant bird life, picnic sports and angling. Suspended bridges cross the Prieska River.
- Fort. On top of Prieska Koppie, built with tiger's eye by the British during the Anglo-Boer War (1899-1902).
- Green Valley Nuts. Cultivation and export of Pistachio Nuts.
- Hiking Trails. The Oranjezicht and T'Keikamspoort hiking trails are 10km south of town in the Doornberge.
- Hunting.
- Khoisan Rock Art. Can be viewed at the farms Kleindoring, Omdraaisvlei, Uitdraai and Wonderdraai.
- Memorial Garden. In town, it contains graves of British soldiens killed during the Anglo-Boer War.
- Prieska Museum.
- Ria Huysamen Aloe Garden. A large array of succulents. The area between Prieska and Vioolsdrif is often called the 'Rock Garden Route'. The halfmens and succulents of the Lithops family are found here.
- Schumann Rock Collection. Includes semi-precious stones and San Stone implements at the municipal office.
- Wonderdraai. A wonderful freak of nature where a horsehoe-shaped island is formed by the flow of the Orange River and makes it seem as if the rivers turns to low uphill.

1.10.11 Proposed Development Projects/Initiatives

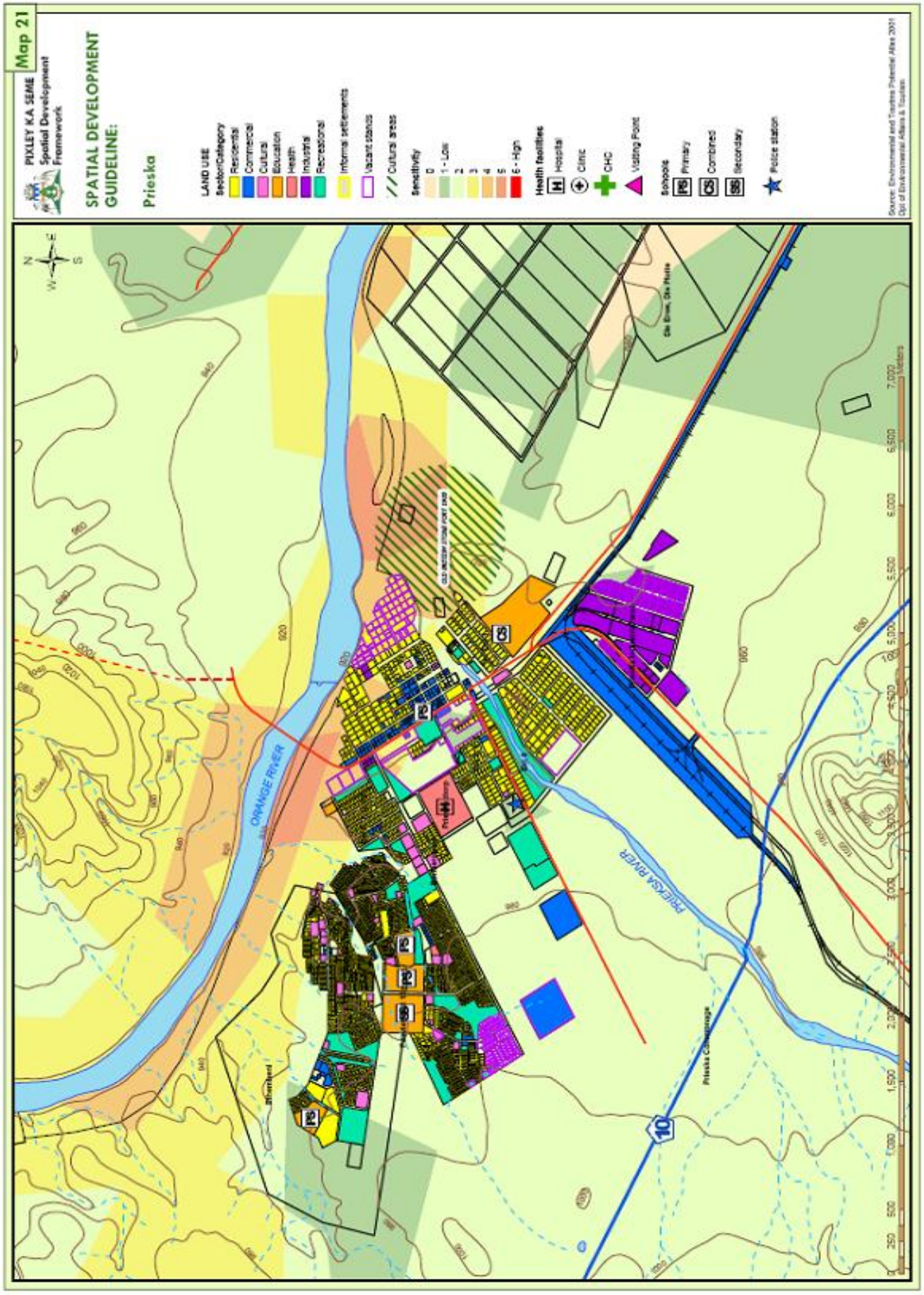
TOURISM

- The re-development and Expansion of the Die Bos Resort in Prieska

HOUSING

- Siyathemba needs an additional 33ha of land for new housing (±23ha for Prieska).

Map 4 - Spatial Development Guidelines for Prieska



3. KEY SPATIAL ISSUES IN THE MUNICIPLA AREA

From the above spatial overview and identified local spatial issues, the following key regional spatial issues were identified as the basis to be address by the spatial development framework.

1.11 Access to land

The issue of access to land relates both to the local authorities as well as individuals and groups. As far as individuals and groups are concerned, the burning issues are access to residential land in urban areas and to agricultural land for emerging farmers.

1.12 Land development

Land Development relates to the availability, preparation and funding of certain key land uses such as sites for housing developments, land for needed social amenities and economic activities. The key issues requiring attention in this regard include: the generation of proper information of projected land development needs, funding, co-operation and local capacity to evaluate development applications.

1.13 Spatial integration

Spatial integration has to focus on both a macro and a micro level. On a macro level there is a need for a more focused development at key nodal points to develop the region strategically within current resource constraints. On a micro level, most town areas are still geographically segregated and direct intervention within former buffer strip areas will be required to integrate communities.

1.14 Sustainable land management

The long-term sustainability of all land development practices will be the key factor in the environmental and economic future of this predominantly agricultural region. Specific attention will have to be given to the building of capacity amongst especially emerging land users and the provision of a management framework to all land users within the district.

1.15 Proper distribution network

The vast distances between the various towns in the district make all communities dependent on the regional distribution roads for social as well as economic functioning. Most of these roads are however in a state of disrepair and especially the routes falling within the corridor areas will have to be upgraded and maintained as a matter of urgency.

1.16 Land conservation

Various areas along the Orange River are well suited for tourism and agricultural development alike. These areas are however sensitive to over utilization and pollution and will have to be protected and conserved to ensure long-term benefits thereof.

1.17 Water resource challenges

One of the major challenges facing government is to promote economic growth and job creation, while at the same time providing for social development as a means to addressing the needs of the poor. Economic development requires sustainable bulk water supply. In municipal area several communities are experiencing water problems. Most of these towns rely on groundwater.

4. DEVELOPMENT PRIORITIES

1.18 Development Challenges

The development challenges in the municipal area include:

- Lack of diversification of the region economy;
- Lack of investment in the region;
- Lack of employment opportunities;
- Rising level of poverty;
- Geographically imbalanced settlement structure;
- Lack of skills;
- Lack of entrepreneurship;
- Small number of SMME's active in the region;
- Underutilization of the region natural resources and economic opportunities; and
- Lack of water for irrigation.

1.19 Opportunities and Constraints

1.19.1 Water and Sanitation

- Water supply and sanitation facilities on farms require attention.

1.19.2 Infrastructure

- Need for an adequate public transport system for people who want to undertake long distance trips.
- Good road network and rail network. Maximum economic benefit through the major transport networks.
- Access roads to settlements and Gravel access roads between towns need urgent maintenance and upgrading.
- Feasibility studies are required to investigate the alternatives available in addressing the water shortages.
- Revitalization of the Railway network to promote manufacturing sector in the heavy industries.

1.19.3 Land

- Commonage land key element for land reform
- Compilation of a land audit

1.19.4 Agriculture

- Wool currently processed in the Eastern Cape
- Irrigation along the Orange River. Products leave the district unprocessed.

1.19.5 Tourism

- Orange River
- Game reserves
- Historical sites

1.19.6 Mining

- Tiger's eye in Prieska
    - DGDS – intensify mineral exploration and update knowledge on the region mineral resources.

1.19.7 Housing

- Additional land needed for residential development

1.19.8 Recreation

- The recreational facilities such as soccer pitches, swimming pools, etc. are not well developed in the townships. In some townships there are no sporting facilities.
- Parks in townships are mostly overgrown and unkempt, making these attractive dumping sites.

5. STRUCTURING ELEMENTS

A Spatial Development Framework as indicated earlier needs to be indicative and therefore the need to adopt a set of structuring elements that can give future structure to the municipal area.

The spatial structuring elements that were identified are the following:

Nodes:

These are areas where development (facilities, services and economic opportunities) tends to concentrate.

Development nodes are areas where local economic growth will be promoted. Social and public amenities may also be located within or nearby the development node. The size, scale, nature and form of a node will differ from one another, as a variety of activities will tend to cluster in and around the node. The larger the influence sphere of a node, the more intense the development associated with the node and the greater the density and area that the node will occupy.

The towns / areas identified as development nodes are:
- Prieska
- Marydale

Tourism nodes will offer leisure and tourism products to the consumer**.** The node will attract tourists due to its unique features, historic value or special character and will therefore have an edge over any other node in the district to draw tourists to the region.

Areas / towns identified as tourism nodes are:
1. Prieska
2. Marydale
3. Niekerkshoop
4.Kareeberg

Corridors:
Development corridors are characterized by higher order ribbon-like development along routes that can be classified as movement corridors. These corridors promote economic activity along these routes. However, it is foreseen that the presence of economic activity along these routes will require special attention.

Areas identified as development corridors are:
1. N10
2. N8

Tourism Corridors are scenic routes linking places attracting tourists with one another. These routes will therefore support development focusing on the hospitality and tourism industry along it.

Tourism corridors are:
1. N8
2. R357
3. Orange River

Those areas and towns, which have not been identified as development nodes, will continue to exist as service centres. It is therefore sensible to focus capital investment to favour those nodes where development will more likely be sustained in future. This implies that both public and private initiatives in areas identified as

development nodes should be supported whereas those in areas not identified as development nodes should be re-evaluated and where possible, funding or investment should be channelled to the development node closest to the intended development. In practise this will imply that people will relocate to those towns with growth potential, as jobs will more likely be created in these areas. This will have the effect that a greater need for new residential sites, housing and infrastructure will arise in these areas, thus requiring the allocation of grants for capital investment projects to favour these localities more than those with limited growth potential.

The areas without growth potential should be developed with social services in support of those areas where growth will be experience. It is therefore proposed that attention should be paid to education, health and social infrastructure in these service nodes so that the quality of life of people staying there can be improved.

Conclusion:
The SDF constitutes the land use framework for the municipal area and needs to guide land use management for local municipalities. The SDF of Siyathemba Municipality tries to focus development within the district in those areas where development is most likely to occur. It therefore identifies development nodes and corridors which need to receive priority for future development.

6. SUMMARY OF ACTIVITIES AND PROJECTS FOR THE DISTRICT

The following are identified as specific actions and projects that need to be undertaken in order to provide additional detail in respect of the SDF's proposals.

PROJECT	REASON FOR PROJECT'S IMPORTANCE	RESPONSIBILITY	EST. COST
Infrastructure: Building of a railway line between Douglas and Belmont		Department of Economic Affairs	R35m
The Square Kilometer Array (SKA) & Karoo Array Telescopes (KAT) near Carnarvon.	– Its of global importance and interest – Major infrastructure development and investment – New skill development – Job creation and training in construction, maintenance and high tech – Retaining skilled people – Provide capacity to teach maths and science in schools – Completion date 2020	Department of Science and Technology	R12b
Construction of 2 new schools Douglas and Schmidtsdrift (Batlhaping)		Department Education	R7.7m
Building of clinic in Douglas and Philipstown Construction of new hospital in De Aar Construction of new clinics at Noupoort, Petrusville and Prieska	– Improvement in the health of pregnant women – Reduce maternal morality rate – EMS and patient transport – Develop specialist hospital services – HIV/AIDS: Offering voluntary counseling and testing services to sexually active persons – Coherent care and support to people living with IDA/STI/TB- R10 million dedicated to care givers – Establish an integrated mental health service	Department of Health	R2.6m R150m R1.4m each

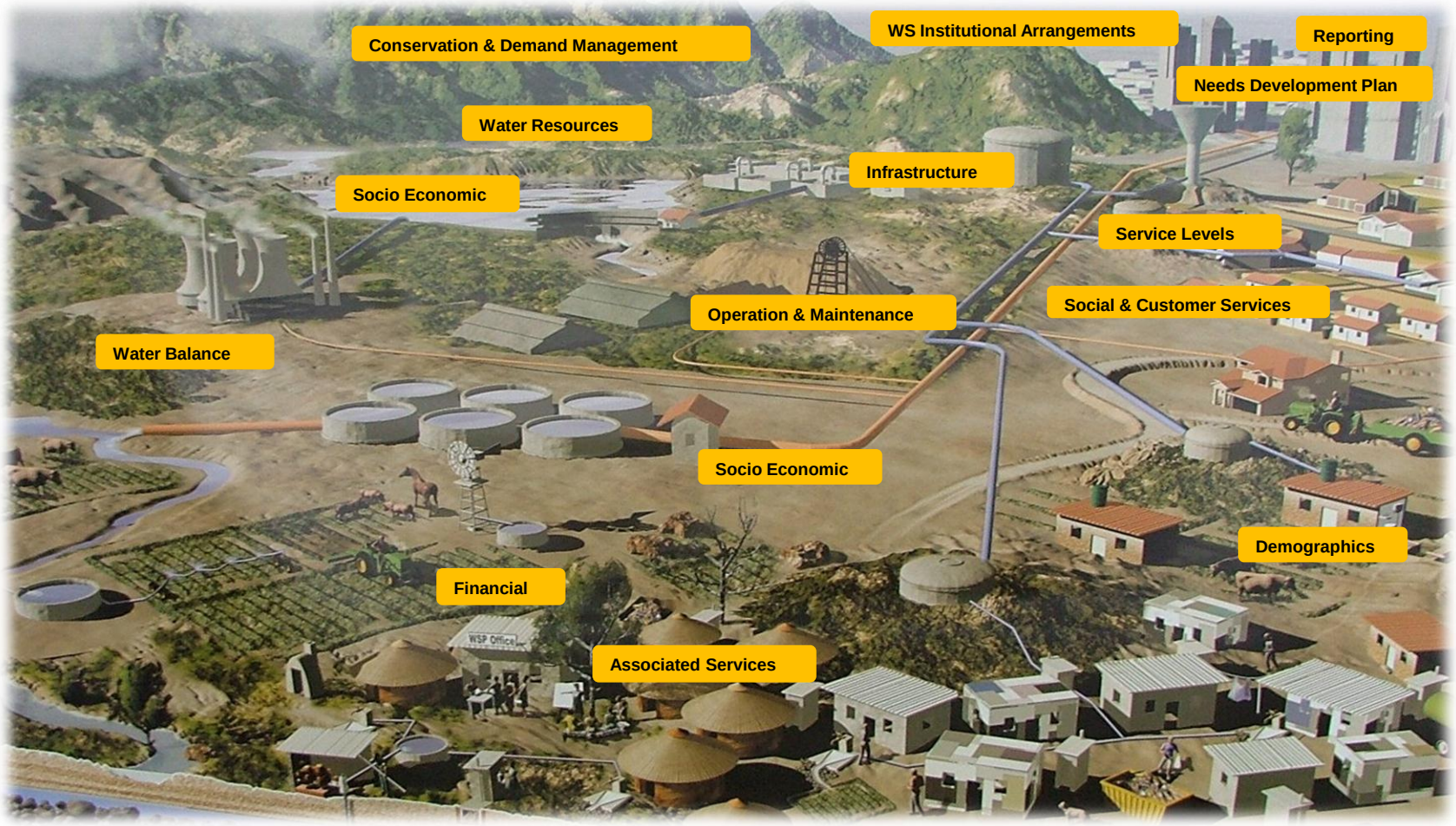
PROJECT	REASON FOR PROJECT'S IMPORTANCE	RESPONSIBILITY	EST. COST
Social Services	– Extension of child support grant to age range of 11 – 14 years (CDW's) – Effectiveness of Group Foster Care Homes determined – Monitoring and implementation of the Children's bill – Development of sustainable food security programs – Establish interdepartmental provincial, regional and local FES committees – Old Age grant assistance – Pay point development – Resources allocated for implementation of five integrated, intersectional projects as the main thrust of the provincial integrated social crime prevention program in the 21 provincial crime weight stations (5: 1 De Aar, 1 Sunrise, 1 Colesberg, 1 Hopetown, 1 Douglas) – Project Anti-substance abuse – Project Public Education, Awareness and mobilization towards moral regeneration – Project co-ordination of Criminal Justice System – Project Stop Violence against women & children – Project Safer streets and physical environment	Department Social Services	
Allocation of 2000ha of water rights for OREFS	– Emerging farmers' support through CASP : Waterdaal plot owners, Ebenezer trust, Drieplotte, Tumelo Youth Trust – Implementing of Land care projects: Beesbok; Vosterdam & Strydenburg – 4 Food Security Projects – Starter packs to 20 schools and 10 health centre's/clinics	Department of Agriculture and Land Reform	

PROJECT	REASON FOR PROJECT'S IMPORTANCE	RESPONSIBILITY	EST. COST
Building of 192 housing units in 2005/6 financial year Project consolidate – quick-wins end June 2005 MIG's: – Kareeberg LM – Siyancuma LM – Umsobomvu LM – Emthanjeni LM – Renosterberg LM – Thembelihle LM Bucket eradication		Department Local Government & Housing	 R7,2m R4,2m R5,4m R5,9m R13,1m R22,2m R6.5m
Upgrading of the road from Douglas to Hopetown, from gravel to tarred road Resealing of roads in the Karoo District Upgrading of economic roads		Department of Transport, Roads and Public Works	R10m R30m R8m
Infrastructure: Building of a new Sports facility in Petrusville **Services:** Siydlala Mass participation Programme **Economic Development:** Appointment of 3 Hub co-ordinates		Department of Sports, Arts & Culture	R3.2m R2.4m (allocation for 5 regions) 1800/person/month
Appointment of an activity coordinator			R1200/person/ month/ municipality

WSDP; WATER SERVICES DEVELOPMENT

Siyathemthemba Local Municipality 2010

Module 1: Overview and Assessment of the status of information and strategies on a WSA level



Document Date: January 2010

WATER SERVICES PLANNING LOGIC

II

Water Services Business Elements

- Topic 1: Administration
- Topic 2: Demographics
- Topic 3: Service Levels
- Topic 4: Socio Economic Background
- Topic 5: Water Services Infrastructure
- Topic 6: Operation & Maintenance
- Topic 7: Associated Services
- Topic 8: Conservation & Demand Management
- Topic 9: Water Resources
- Topic 10: Financial
- Topic 11: WS Institutional Arrangements
- Topic 12: Social & Customer Services Requirements
- Topic 13: Needs Development Plan (Project List)
- Topic 14: Reporting

Water Services Development Plan Components

Knowledge

Obtain an in-depth knowledge of overall WSA Water Services situation. Evaluate information. Identify gaps and shortcomings

Information

Obtain detail information to address gaps identified in module 1. Incorporate into module 2

Strategies

Obtain existing Plans & Strategies.

Develop strategies identified as gaps in module 1. Incorporate into module 3

Reporting

Report to DWAF
Link reporting requirements to topics in WSDP

Interpretation of Strategies & Reporting

Extract to produce strategic overview

Develop Strategic Interpretation Report on baseline review

Inputs towards WSA Annual Business Plan

Module 1: Comprehensive Overview and Assessment
All related enabling factors per water services topic listed in a tabular format to present an overall status quo of information on a WSA level. The section also references the enabling factors against Compliancy and Needs development plan criteria to provide an overall WSA WSDP assessment
NB: This document should be completed on a pre-compiled electronic format available at www.dwa.gov.za and submitted as a data document, not image document eg.PDF

Current Document

Module 2: Detail information on component level
This module will provide detail information regarding the different topics as well as house all information regarding certain aspects within a topic.

Module 3: Strategic Plans
- Integrated Resource Management Plan
- Groundwater Management Plan
- Water Containing Waste management Programme
- Water Management Information System
- O&M Plan
- Unaccounted for Water Strategy
- Backlog Eradication Strategy
- Cost recovery Strategy
- Water Quality Monitoring Strategy

Module 4: Reporting
- IDP Assessment framework
- DWA Water Services Regulatory Performance Management System (RPMS)
- WSA Checklist

WSDP Strategic Oversight

Baseline Review Report

WSDP Strategic Interpretation Report

Outflow to WSA Annual Business Plan

SALGA

THE WATER SERVICES BUSINESS

INDEX

DRIVERS

CLIENT NEEDS

ASSETS

RESOURCE DEVELOPMENT INFRASTRUCTURE

WATER BALANCE

MANAGEMENT

EFFECTIVE MANAGEMENT

- Water Use
- Conservation & Demand Management
- Finance
- Social & Customer Services Requirements
- Return Flow
- Sanitation

PLANNING & REPORTING

NEEDS DEVELOPMENT PLAN

WSDP TOPICS

	Page Nr.	
1. Administration	2	1
2. Demographics	4	2
3. Service Levels	5	3
4. Socio Economic Background	9	4
5. Water Service Infrastructures	10	5
6. Operation&Maintenance	14	6
7. Associated Services	19	7
9. Water Resources	27	9
8. Conservation & Demand Management	21	8
10. Financial	30	10
11. Water Services Institutional Arrangements	36	11
12. Social & Customer Service Requirements	38	12
13. Needs Development Plan (Program List)	40	13
14. Reporting	42	14

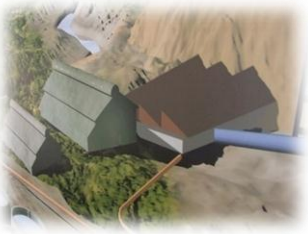
SALGA

Siyathemba WSA: Date 2010

Vision & Mission Statement:

What is the WSA's Vision & Mission Statement on Water Services?

Demographics	Total
Number of People	17513
Total Number of Settlements	3
Total Number People Urban	11508
Total Number People Rural	6004
Total Number of Settlemetns Urban	1
Total Number of Settlemetns Rural	2



Water Priority	Water Need Description	Settlements	Population	Households
Definition 1	No Water Services	0	0	0
Definition 2	Inadequate RDP Infrastructure Need: Extension	0	0	0
Definition 3	Inadequate RDP Infrastructure Need: Upgrade	1	3502	761
Definition 4	Inadequate RDP Resource Need	0	0	0
Definition 5	Inadequate RDP Management Need: O&M	0	0	0
Definition 6	Inadequate RDP Management Need: Refurbishment	2	15010	3574
Definition 7	Inadequate Housing Interim Solutions	3	1908	449
Definition 8	Inadequate Housing Permanent Solutions	3	15334	3651
Adequate:	StandPipe	2	680	160
Adequate:	Yard Connection	3	3108	731
Adequate:	House Connection	3	1010	238

NB! Backlog 3132 households. Reasons: 1. Development 2. Farm dwellers relocate to town 3. Backyard Dwellers

WSDP: Strategic Oversight

V

Siyathemba WSA: Date 2010

What are their needs regarding sanitation?

Sanitation Priority	Sanitation Need Description	Settlements	Population	Households
Definition 1	No Sanitation	2	861	205
Definition 2	Inadequate Infrastructure Need: Upgrade to RDP level;	2	861	205
	Bucket Programme	2	861	205
Definition 3	Inadequate: Infrastructure Need: Upgrade	2	861	205
Definition 4	Inadequate: Resource Need	1	3502	824
Definition 5	Inadequate Management Need: O&M	0	0	0
Definition 6	Inadequate RDP Management Need: Refurbishment	1	3502	824
Definition 7	Inadequate Housing Interim Solutions	3	1908	449
Definition 8	Inadequate Housing Permanent Solutions	2	680	160
Adequate:	None Waterborne	2	861	205
Adequate:	Waterborne Low Flush	0	0	0
Adequate:	Septic Tanks	2	5504	1295
Adequate:	Waterborne Waste Water Treatment Works	1	11508	2708

2

3

10

What is our water availability status to supply all the needs?

Water sources	Number of sources	Current abstraction (Ml/Year)	Licensed abstraction (Ml/Year)
Groundwater	2	384000	211000
Surface Water	1	2280000	2000000
External Sources (Bulk purchase)	0	0	0
Water returned to resources	0	0	0
How much water is re-used (Recycled Water)	0	0	0

_____ WSA: Date 20_ _

5

6

4. Water & Sanitation Infrastructure ....?

4.1. How does the infrastructure picture look in my WSA to distribute water to our people?

4.2. What is the general condition of Waste Water Treatment Works?

Topic 5: Water Infrastructure	Total
Total Number of Schemes	3
Total bulk pipeline km.	14
Total Number reservoirs	10
Total Number pump stations	14
Total Number of Water Treatment Works	1
Total Number of Waste Water Treatment Works	1

The general condition of WWTW	Total
1. Estimated cost to Upgrade	R -
2. Estimated cost to Refurbish	R -
3. Existing Budget	R -

5. How sufficient is our Operation & Maintenance:

5.1. Do we have enough people to perform the function?

5.2. What is the % infrastructure not working due to O&M?

5.3. What is the problem?

Topic 6: Operation & Maintenance	Total
Total Number of O&M staff	14
Total Number of O&M staff sufficient? Yes/No	No
Total Number of O&M staff required	4
Define the problem	Budget

_____ WSA: Date 20_ _

6. Do I pollute my environment and water sources?

Topic 8: Conservation & Demand Management

Statement on pollution and effluent release

5

6

7. 1. What is my total Water Services Budget?
7.2. Is my budget enough to eradicate backlog and maintain the WS infrastructure?
7.3. What is the shortfall?

Topic 9: Financial

Total Water Services Budget:	R 4 650 000.00
Is the budget enough to eradicate backlog and maintain the WS infrastructure? (Yes/No)	No
Shortfall:	R 5 000 000.00

8

9

8. Do we have plans and projects in place to address the water services issues and requirements?

Topic 14: Needs Development Plan

Total Number of projects:	5
Sufficient to eradicate backlog: (Yes/No)	No

14

15

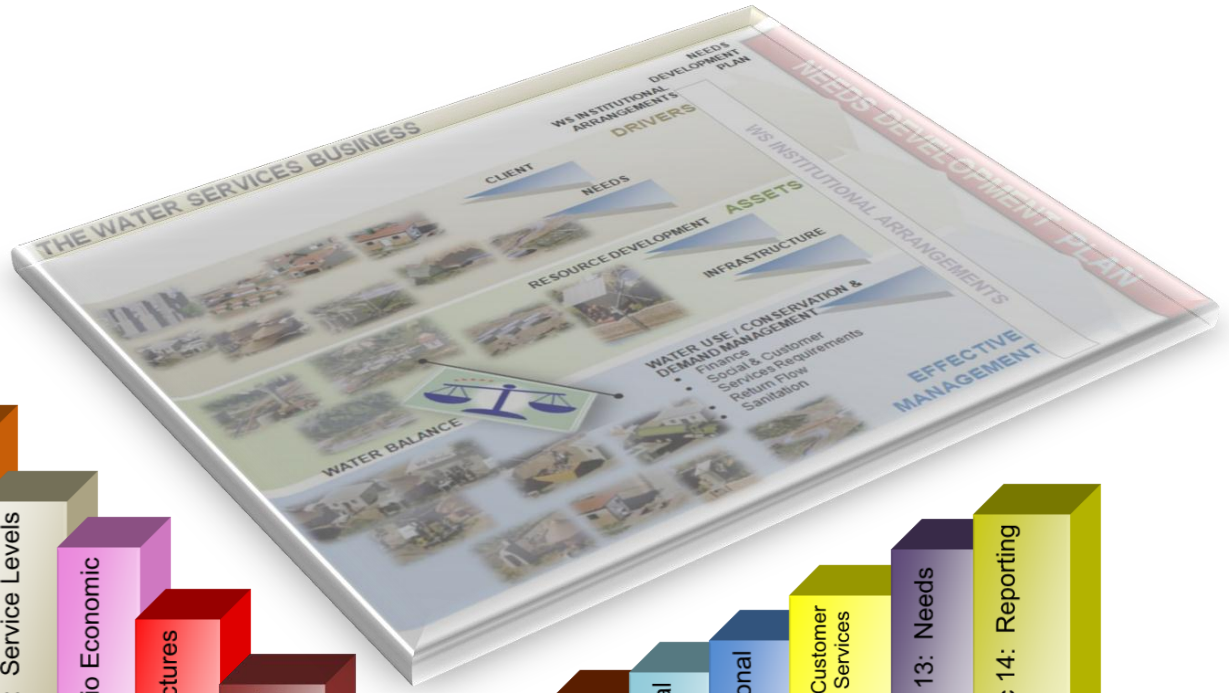
SALGA

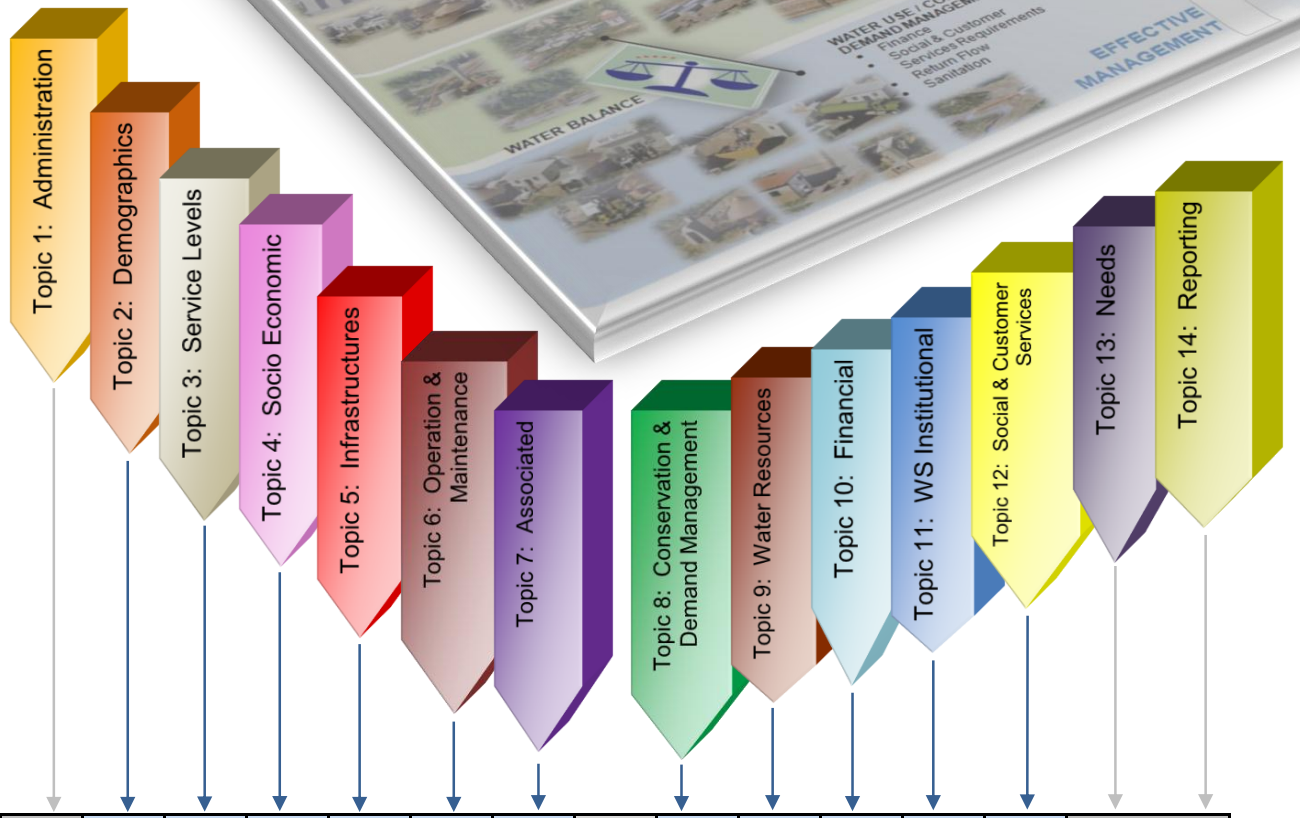
Siyathemba WSA: Date 2010

An Overall Critical Self Evaluation of the Overall WSDP Knowledge Base

How does my WSA fare regarding knowledge and information of the building pillars of the Water Services Business?

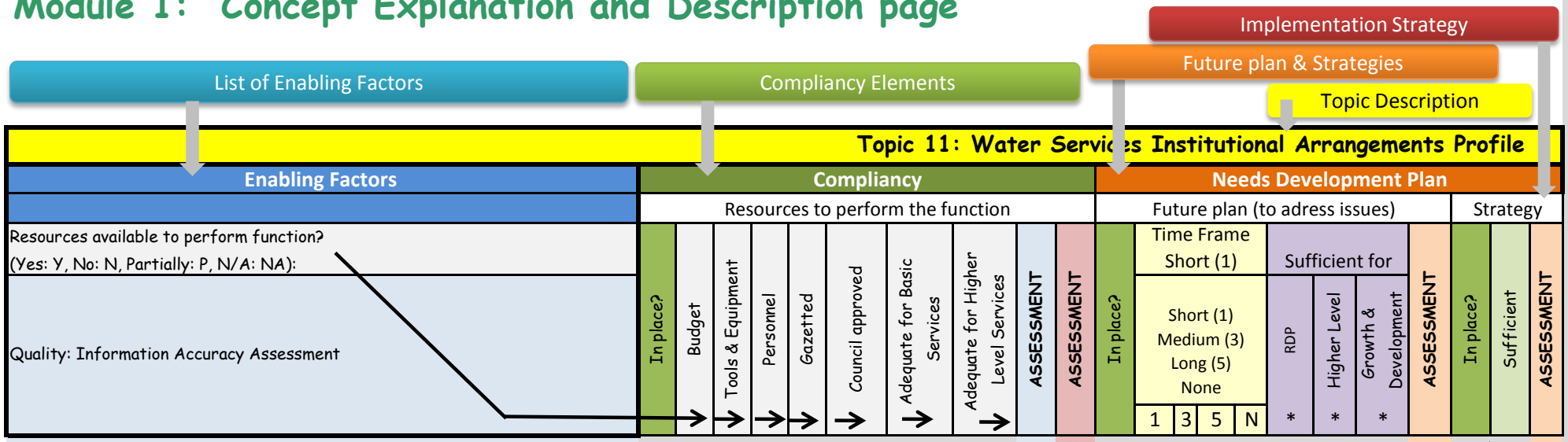
A % summary evaluation derived from the WSDP Document C Module 1 per topic





OVERALL QUANTITY ASSESSMENT		1%	0%	1%	32%	7%	1%		27%	0%	1%	0%	1%	
OVERALL QUALITY ASSESSMENT		1%	0%	1%	35%	1%	1%		27%	0%	0%	0%	0%	

Module 1: Concept Explanation and Description page



INDEX: List of Topics

1. Administration
2. Demographic
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5. Infrastructure
6. Operation & Maintenance
7. Associated Services
8. Conservation & Demand Management
9. Water Resources
10. Financial
11. Water Services Institutional Arrangements
12. Social & Customer Service Requirements
13. Needs Development Plan
14. Reporting

Each Topic has its own enabling factors that will make the Topic work

Quality: Information Accuracy Assessment
An indication of the accuracy of the information
Poor: 10%
Below Standard: 30%
Average: 50%
Fairly Accurate: 60%
Very accurate: 80%

Is there a Future Plan in Place?
(Physical document that addresses issues & shortcomings)

Is there an Implementation Strategy in Place?
(Must be a implementation plan of action that reflects in the budget)

Quantity Assessment
An idication of the availability of information to adress the issue in relation to the total study area
None: 10%
Limited 30%
Partially: 50%
Good coverage: 75%
Available for whole area: 90%

General Assesment on Scale 1-5
None 0%
Limited 10%
Partial 30%
Good 75%
Excellent 90%

WSA Name	Siyathemba LOCAL MUNICIPALITY

Status Tracking of WSDP

	YEAR 1			YEAR 2			YEAR 3			YEAR 4			YEAR 5			YEAR 6		
Status	Modules: All/1/2/3 or 4	Reference date	Date submitted	Modules: All/1/2/3 or 4	Reference date	Date submitted	Modules: All/1/2/3 or 4	Reference date	Date submitted	Modules: All/1/2/3 or 4	Reference date	Date submitted	Modules: All/1/2/3 or 4	Reference date	Date submitted	Modules: All/1/2/3 or 4	Reference date	Date submitted
Interim	1	2010/02/18	2010/02/28															
Draft	1	2010/02/18	2010/02/28															
Adopted	1		2010/03/15															
Annual Review	1		2010/03/15															
New	1																	
Public Viewed	1																	

Role Players Contact Details

POSITION	PERSON	TEL	FAX	CELL	EMAIL
Municipal Manager	Gert J. Bessies	(053) 353 5300	(053) 353 1386	(083) 677 0070	psk.muni@prieska.co.za
Executive Mayor	Elizabeth Nel	(053) 353 5300	(053) 353 1386	(079) 998 8575	psk.muni@prieska.co.za
Water services Councillor	Abraham Faro	(054) 871 5500	(054) 871 5501	(079) 978 5162	psk.muni@prieska.co.za
WSDP Contact	Johan Badenhorst				
IDP Manager	Jacob Basson	(053) 353 5304	(054) 871 5501	(082) 401 2767	jacob@siyathemba.gov.za
PIMSS Senior Planner					
Technical Services	Johan Badenhorst	(053) 353 5306	(054) 871 5501	(082) 804 2374	johannb@siyathemba.gov.za
Treasurer					
WSDP Data Custodian	Johan Badenhorst				
WSDP Custodian	Johan Badenhorst				
Data official					
Acting Mayor					
Acting Municipal Manager					
PMU Manager					
Chief Financial Officer	Heirich Nieuwenhuizen	(053) 353 5301	(054) 871 5501	(084) 919 2251	heinrich@siyathemba.gov.za
Acting Chief Financial Officer					
Mayor					
Housing	Moos Nyl				
Enviromental					
Infrastructure	Johan Badenhorst				

Topic 1: Administration

Professional Service Provider (PSP)

Company		Twelve Developmental Services	
Name of PSP WSDP Project Manager		Sakkie Van Den Berg	
Tel: (054) 491 1162	Cell: (082) 551 9947	Fax: (054) 491 1162	E-mail: sakkievdberg@vodamail.co.za

Inputs

Components	Chapter	Name	Designation	Role	Contact address, and number
Topic 1	Module 1	Suzette Cronje	Consultants	Collection	28 cronin Street
Topic 4	Module 1	Dan Modupe			HadisonPark
		Sakkie, Luis Brink			Kimberley
		Patrick Speelman, Paul louw			tel: (053) 861 5063
Name of PSP WSDP Information Systems Operator					
Tel:	Cell:		Fax:		E-mail:

Capturing and revision of collected Data

* Sector Integration

Did this plan consult with other Sector Plans and incorporated their needs

* Sector	* Inter-action	* To which extend was it calculated? (Refer to Page 1: General Assesment on Scale 1-5)	
Agri-Culture	0%	0%	
Mining	0%	0%	
Tourism	0%	0%	
Other 1: IDP	50%	50%	
Other 2: Budget	50%	50%	
Other 3:			
Other 4:			

* BASELINE INFORMATION: COMPULSARY FIELDS

SETTLEMENT DEMOGRAPHICS

			Assessment	Assessment
* 2.1	Total Population	17513	60%	60%
* 2.2	Total number of households	4121	60%	60%
* 2.3	Average household size	4.25	60%	60%

Quality: Information Accuracy Assessment

Quantity: Assessment of Information Completeness

	2.4 Settlement Type	Number of settlements	Population per settlements type	Assessment	Assessment
	Farming		500	60%	60%
Urban	Metropolitan Area	0	0	60%	60%
	Urban - Formal Town	1	11508	60%	60%
	Urban - Former Township	0	0	60%	60%
	Urban Fringe - Ex-homeland Towns (Formal Towns)	0	0	60%	60%
	Urban Fringe - Informal Settlements	0	0	60%	60%
	Squatter Camp - Peri-urban	0	0	60%	60%
	Squatter Camp - Urban	0	0	60%	60%
	Working Towns - Mines, etc.	0	0	60%	60%
	Service Centres - Mines, Prisons etc.	0	0	60%	60%
	Urban				
Rural	Rural - Dense Village > 5000	0	0	60%	60%
	Rural - Small Village <= 5000	2	5504	60%	60%
	Rural Scattered	0	0	60%	60%
	Rural Scattered Dense	0	0	60%	60%
	Rural Scattered Low Density	0	0	60%	60%
	Rural Scattered Very Low Density	0	0	60%	60%
	Unknown	0	0	60%	60%
	Rural				

Comments: Prieska has been the only urban area in Siyathemba Municipal area

Public Amenities Consumer Types

2.5 Social Services type	No. of facilities	Area (Ha)	Assessment	Assessment
Police Stations	3		60%	75%
Magisterial Offices	1		60%	75%
Schools	7		60%	75%
Health Facilities	5		60%	75%
Prisons	0		60%	75%
Industries	0		60%	75%
Mining	0		60%	75%
Resorts and tourism	1		60%	75%
Agriculture dry land		N/A	0%	0%
Agriculture irrigation		N/A	0%	0%
Agr. Intensive livestock/grazing		N/A	0%	0%
Agr. Extensive livestock/grazing		N/A	0%	0%
Conservation areas	2		60%	75%

OVERALL QUALITY ASSESSMENT	1%
OVERALL QUANTITY ASSESSMENT	1%

* BASELINE INFORMATION: COMPULSARY FIELDS

Topic 3: Service Levels Profile

3

3.1 SETTLEMENT WATER SERVICE LEVEL DEFINITIONS

Quality: Information Accuracy Assessment

Quantity: Assessment of Information Completeness

CLASSIFICATION		DEFINITIONS / SETTLEMENTS	Settlements	Population	House holds	Assessment %	Assessment %	Needs Development Plan: Future plan (to adress issues) In place? (Yes / No / N.A.)	Time Frame: Short (1) Medium (3) Long (5) None — 1	3	5	N	Sufficient for: RDP *	Higher Level *	Growth & Development *	ASSESSMENT %	Strategy: In place? (Yes/No)	Sufficient (Yes/No)	ASSESSMENT %
* Definition 1	No Water Services	Whole community never had any formal (municipal) water supply system.	0	0	0	60%	75%	Y		Y				Y	Y	75%	Y	Y	75%
* Definition 2	Inadequate RDP Infrastructure Need: Extension	Communities have grown structurally and there are households that do not have water : **TOTAL**	0	0	0	60%	75%	Y		Y				Y	Y	75%	Y	Y	75%
		1.Network: new infra																	
		2.Storage: new & adjacent,																	
		3.Local Available Source: New BH, pipe																	
* Definition 3	Inadequate RDP Infrastructure Need: Upgrade	Existing infra not on RDP std.																	
		1.Network: too small pipes,																	
		2.Storage: Add to exist / elevation																	
		3.Source: Infra to increase exist yield																	
* Definition 4	Inadequate RDP Resource Need	Not enough water in system due to Demand Management problems or source development																	
* Definition 5	Inadequate RDP Management Need: O&M	Water can be restored to RDP (where infra ok) by: enough & efficient staff and sufficient funds for O&M (incl. eg: quality at wtw, machines working, etc)																	
* Definition 6	Inadequate RDP Management Need: Refurbishment	Water can be restored to RDP by: Repair/Replace with same existing infra																	
		TOTAL RDP NEED																	
* Definition 7	Inadequate Housing Interim	Squatter (un-orderly layout) to be addressed with temp infra	2	680	160	60%	75%	Y			Y				Y	75%	Y	N	75%
* Definition 8	Inadequate Housing Permanent	Orderly layout where housing scheme is needed. Eg overcrowded yard, existing low cost housing project with need	3	13311	3132	60%	75%	Y			Y				Y	75%	Y	N	75%
		TOTAL HOUSING NEED																	
Adequate:	StandPipe	Adequate Infra	2	680	160	60%	75%	Y			Y				Y		Y	N	75%
Adequate:	Yard Connection	Adequate Infra	3	3101	731	60%	75%	Y			Y				Y		Y	N	75%
Adequate:	House Connection	Adequate Infra	3	1010	238	60%	75%	Y			Y				Y		Y	N	75%
		Totals				0%	0%									0%			0%

SALGA

* BASELINE INFORMATION: COMPULSARY FIELDS

Enabling Factors | Needs Development Plan

Future plan (to adress issues) | Strategy

3.2 SETTLEMENT SANITATION SERVICE LEVEL DEFINITIONS

Quality: Information Accuracy Assessment

Quantity: Assessment of Information Completeness

* CLASSIFICATION		* DEFINITIONS / SETTLEMENTS	Settlements	Population	House holds	Assessment %	Assessment %	In place?	Time Frame: Short (1) Medium (3) Long (5) None: 1	3	5	N	Sufficient for: RDP *	Higher Level *	Growth & Development *	ASSESSMENT %	Strategy: In place?	Sufficient	ASSESSMENT %
								Yes / No / NA									Yes/No		
* Definition 1	No Sanitation	Whole community has no never had formal (municipal) sanitation programme.	0	0	0	60%	75%	Y				N	N	N	N	75%	Y	Y	75%
* Definition 2	Inadequate Infrastructure Need: Upgrade to RDP level;	Communities have sanitation but below the minimum standard. This will normally be a bucket or an ecological toilet.	0	0	0	60%	75%	Y											
	Bucket Programme	Communities at RDP standard but not appropriate due to local circumstances e.g. shallow ground water levels	1					Y	Y			N	Y		Y	75%	Y	Y	75%
* Definition 3	Inadequate: Infrastructure Need: Upgrade	Existing infra not on RDP std.	2	861	205			Y				N	Y		Y	75%	Y	Y	75%
		Typically, unimproved pit or chemical toilet.						Y				N	Y		Y	75%	Y	Y	75%
* Definition 4	Inadequate: Resource Need	Existing infra not appropriate						Y				N	Y		Y	75%	Y	Y	75%
		1.Waterborne without bulk or reticulation						Y				N	Y		Y	75%	Y	Y	75%
		2.Inadequate bulk capacity	0	0	0			Y				N	Y		Y	75%	Y	Y	75%
* Definition 5	Inadequate Management Need: O&M	Sanitation can be restored to RDP (where infra ok) by: enough & efficient staff and sufficient funds for O&M (incl. pit-emptying, + appropriate actions for waterborne)	0	0	0			Y				N	Y		Y	75%	Y	Y	75%
* Definition 6	Inadequate Basic Management Need: Refurbishment	Sanitation can be restored to RDP by: Repair/Replace with same existing infra	1	3502	824			Y				N	Y		Y	75%	Y	Y	75%
		TOTAL BASIC NEED																	
* Definition 7	Inadequate Housing Interim	Squatter (un-orderly layout) to be addressed with temp infra and appropriate technology	3	1908	449	60%	75%	Y			Y	N			Y	75%	Y	Y	75%
* Definition 8	Inadequate Housing Permanent	Orderly layout where housing scheme is needed. Eg overcrowded yard, existing low cost housing project with need	2	680	160	60%	75%	Y			Y	N			Y	75%	Y	N	75%
		TOTAL HOUSING NEED																	
* Adequate:	None Waterborne	Adequate Infra	0	0	0			Y				N					Y	Y	75%
* Adequate:	Waterborne Low Flush	Adequate Infra	0	0	0			Y				N					Y	Y	75%
* Adequate:	Septic Tanks/Conservancy	Adequate Infra	2	5504	1295			Y				N					Y	Y	75%
* Adequate:	Waterborne Waste Water Treatment Works	Adequate Infra	1	11508	2708			Y				N					Y	Y	75%
		Totals				0%	0%									0%			1%

Topic 3: Service Levels Profile

3.3 Residential, Public Institutions and Industries

Enabling Factors									Compliancy									Needs Development Plan																
									Resources to perform the function									Future plan (to adress issues)															Strategy		
									Billing	Budget	Tools & Equipment	Personnel	Gazetted	Adequate for Basic Services	Adequate for Higher Level Services	ASSESSMENT	ASSESSMENT	In place?	Time Frame Short (1) Medium (3) Long (5) None				Sufficient for			ASSESSMENT	In place?	Sufficient	ASSESSMENT					
																			Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development								
Quality: Information Accuracy Assessment																			1	3	5	N	*	*	*								
Quantity: Assessment of Information Completeness									Yes / No							%	%	Yes / No / N.A.								%	Yes/No		%				
Public amenities consumer types	Type	No. Of consumer units (H-H)	No. Of consumer units with access to: None or inadequate Supply Water	Sanitation	Communal supply	Controlled volume supply	Uncontrolled volume supply																											
* Residential	Urban	2694	0	0	160	0	0	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	1406	0	0	0	0	0	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Police Stations	Urban	1	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	2	0	0		N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Magistrate offices	Urban	1	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	0	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Businesses	Urban	117	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	17	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
"Dry" Industries	Urban	0	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	1	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Office Buildings	Urban	6	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	0	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Prisons	Urban	0	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	0	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Schools	Urban	6	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	2	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Hospitals	Urban	1	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	0	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Clinics	Urban	2	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	2	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
"Wet" Industries	Urban	19	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
	Rural	6	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	60%	75%	y	y	y	y	y	y	y	y	75%	y	y	75%					
Total	Urban	2847	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	1%	1%									1%			1%					
	Rural	1436	0	0	N/A	N/A	N/A	y	y	y	y	y	y	y	1%	1%									1%			1%					
																TOTAL	1%	1%							1%			1%					

3

Topic 3: Service Levels Profile

Enabling Factors	Compliancy	Needs Development Plan	
	Status Quo	Future plan (to adress issues)	Strategy

OVERALL TOPIC ASSESSMENT

Quality: Information Accuracy Assessment

Quantity: Assessment of Information Completeness

	ASSESMENT	ASSESSMENT		ASSESSMENT	ASSESSMENT
3.1 SETTLEMENT WATER SERVICE LEVEL DEFINITIONS	0%	0%		0%	0%
3.2 SETTLEMENTSANITATION SERVICE LEVEL DEFINITIONS	0%	0%		0%	1%
3.3 RESIDENTIAL, PUBLIC INSTITUTIONS AND INDUSTRIES	1%	1%		1%	1%

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	0%
Strategy	1%

OVERALL QUANTITY ASSESSMENT	0%
OVERALL QUALITY ASSESSMENT	0%

GENERAL COMMENTS

Topic 4: Socio Economic Background

4

Socio Economics

Quality of Information Assessment

Quantity: Assessment of Information Completeness

4.1 General

4.1.1 Present population	**17513**	50%	75%
4.1.2 Projected population growth rates	**0.43**	50%	75%
4.1.3 No. of dry industrial consumer units	0	50%	75%
4.1.4 No. of wet industrial consumer units	**0**	50%	75%
4.1.5 No. of commercial consumer units	188	50%	75%

4.2 Age and gender Profile

4.2.1 Permanent resident population	17513	60%	75%
4.2.2 Aged Residents (>65yrs)	55%	60%	75%
4.2.3 Youth Residents (<18yrs)	35%	60%	75%
4.2.4 Male Residents	53.30%	60%	75%
4.2.5 Female Residents	46.70%	60%	75%

4.3 Employment Profile

4.3.1 Eligible Workforce (19 – 65 yrs)	4471	60%	75%
4.3.2 Permanent residents – without jobs	1614	60%	75%
4.3.3 Seasonal farm workers	N/A	60%	75%
4.3.4 Temporary domestic workers	N/A	60%	75%
4.3.5 Permanent farm workers	N/A	60%	75%
4.3.6 Permanent Industry workers	N/A	60%	75%
4.3.7 Professional workers	N/A	60%	75%

4.4 Demographic trends and migration patterns

4.4.1 Permanent resident population	17513	60%	75%
4.4.2 Peak daily labour migration (-) out / (+) in	0	60%	75%
4.4.3 Peak long-term labour migration (-) out / (+) in	-2.50%	60%	75%
4.4.4 Permanent population changes (-) out / (+) in	-0.50%	60%	75%
4.4.5 Holiday Population	1%	60%	75%

4.5 Household income

Definition of poor household by the municipality		% Population		
2x State pensioners			50%	50%
		58%	50%	50%
▪ Monthly household Income (*as per StatsOnline)*			50%	50%
o R1 - R400		22.90%	50%	50%
o R401 – R800		24.30%	50%	50%
o R801 – R1600		44.20%	50%	50%
o R1601 or more		8.60%	50%	50%
o Collective living Quarters		1.09%	50%	50%
			50%	50%
Water Affordability (Population not able to afford water)		58%	50%	50%
o Typical monthly Water Bill	R60, 82		50%	50%
o Average % of monthly income	N/A		50%	50%
Sanitation Affordability (Population not able to afford sanitation)		58%	50%	50%
o Typical monthly Sanitation Bill	R22, 80		50%	50%
o Average % of monthly income	N/A		50%	50%

4.6 Economics

Economic Sector (*As per Reserve Bank Quarterly Bulletins*)	% Contribution to Local GGP	Total No of Employees	No of Local Employees	No of Migrating labour		
Agriculture, Forestry & Fishing	29.20%	1766	1766	0	50%	30%
Mining	0.20%	4	4	0	50%	30%
Manufacturing	2.80%	67	67	0	50%	30%
Electricity, Gas & Water	5.60%	28	28	0	50%	30%
Construction	2.10%	113	113	0	50%	30%
Insurance	0.90%	5	5	0	50%	30%
Finance	7.10%	115	115	0	50%	30%

Comments: Used IDP and older version of the WSDP

OVERALL QUALITY ASSESSMENT	1%
OVERALL QUANTITY ASSESSMENT	1%

5

Topic 5: Water Services Infrastructure Profile

Enabling Factors	Compliancy											Needs Development Plan										
	Status Quo											Future plan (to adress issues)									Strategy		
General Notes: The Enabling Factors below must be completed for the appropriate component compliancy section. All factors must be assessed and the Needs Development Plan section completed	Groundwater (Boreholes)	Surface water (Abstraction Points)	* WTW	Pumpstations	Bulk pipeline	Reservoirs	Reticulation	Water Borne Sanitation	* WWTW	ASSESSMENT	ASSESSMENT	In place?	Time Frame: Short (1) Medium (3) Long (5) None				Sufficient for: RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment													1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness										%	%									%	Yes/No		%
5.1 General Information	(No of Components)																						
* 5.1.1 Is there an Asset Register Monitoring Programme (Yes/No)	y	y	y	y	y	y	y	y	y	60%	75%												
5.1.2 Total number of components / km of pipeline / units	13	1	1	14	14	10	143		3	60%	75%												
5.1.3 VIP toilets TOTAL										60%	75%												
5.1.4 Other dry sanitation toilets TOTAL										60%	75%												
5.1.5 Septic tanks								387		60%	75%												
* 5.1.6 Is there a plan in place to manage untreated effluent (Yes/No)									y	60%	75%												
* 5.1.7 Is there a disaster management plan (Yes/No)	N	N	N	N	N	N	N	N	N	60%	75%												
Sub Topic 5.1 Compliancy & Needs Development Plans Assessment										1%	0%									0%			0%
5.2 Operation																							
5.2.1 Previous vandalism or theft (Security Problem) (Yes/No/Not Required: NR)		y	y	y	N	N	y	y	y	60%	75%	N				N	N	N	N		N	N	0%
5.2.2 Is the abstraction registered with DWA?	y	y	y	y	y	y	y	y	y	60%	75%	y		y			y	y	N		N	N	75%
5.2.3 % Allocation for domestic consumption (licensed)	100%	100%								60%	75%	y											
5.2.4 % Of domestic allocation used (licensed)	20%	11%								60%	75%												
5.2.5 Is abstraction recorded?	y	y	y							60%	75%	y	y				y	y	y		y	y	90%
5.2.6 Safety inspection performed: Regular	N	N	N	N	N	N	N	N	N	60%	75%	N	N	N	N	N	N	N	N		N	N	0%
5.2.7 Total volume of water treated per year (Ml/annum)			1824							60%	75%	y		y			y	y	y		y	N	75%
5.2.8 Average Operating hours per day			13							60%	75%												
* 5.2.9 Is there a Water Quality Plan (Yes/No)	y	y	y	y					N	60%	75%	y	y				y	y	N		y	N	10%
* 5.2.10 Sample failure %	1%	0	0						N/A	60%	75%	y	y				y	y	y		y	y	75%
* 5.2.11 Autherisation Compliance			y						N	60%	75%	y		y			y	y	y		y	N	30%
5.2.12 Are there any standby pumps available?				y						60%	75%	y		y			y	y	y		y	N	75%
5.2.13 Is there any leakage control? (Pressure regulation)					N					60%	75%	N	N	N	N	N	N	N	N		N	N	0%
5.2.14 How many illegal connections to date?			N		N		N/A			60%	75%	N	N	N	N	N	N	N	N		N	N	0%
5.2.15 % Illegal connections be formalized?					0					60%	75%	N	N	N	N	N	N	N	N		N	N	0%
5.2.16 What is the storage factor (x daily use)						2				60%	75%												
5.2.17 Total volume of water received and treated per year (Ml)			1824						793	60%	75%												
5.2.18 Average Operating hours per day			13						24	60%	75%												
5.2.19 Discharge volume (Ml/annum)			2956						732	60%	75%												
5.2.20 Volume of effluent recycled (Ml/annum)									0	60%	75%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	
5.2.21 % Effluent controled									100%	60%	75%	y		y			y	y	y		N	N	75%
5.2.22 Permitted effluent (Ml/annum)									390	60%	75%	y	y				y	y	y				

Siyathemba LOCAL MUNICIPALITY WSDP: 20__

Topic 5: Water Services Infrastructure Profile

5

Enabling Factors | Compliancy | Needs Development Plan

Status Quo | Future plan (to adress issues) | Strategy

General Notes: The Enabling Factors below must be completed for the appropriate component as marked in yellow within the Compliancy section. All factors must be assessed and the Needs Development Plan section completed		Groundwater	Surface water	WTW	Pumpstations	Bulk pipeline	Reservoirs	Reticulation	Water Borne	WWTW	ASSESSMENT	ASSESSMENT	In place?	Time Frame: Short (1) Medium (3) Long (5) None 1	3	5	N	Sufficient for: RDP *	Higher Level *	Growth & Development *	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment																									
Quantity: Assessment of Information Completeness		Yes/No									%	%	Yes/No / N.A.									%	Yes/No		%
5.2.22 Solid waste disposal (m^3/annum)	N/A												N	N			N					0%	N	N	0%
5.2.23 Sludge produced (m^3/annum)	N/A									N/A	80	90	N				N	N	N	N		0%	N	N	0%
5.2.24 % Of the time that effluent is chlorinated	N/A									0	50	50	N				N					0%	N	N	0%
Sub Topic 5.2 Compliancy & Needs Development Plans Assessment											6%	7%										0%			0%
5.3 Functionality																									
5.3.1 General physical condition (N: Not in operation/P: poor/G: good)		G	G	G	G	P	G	P	G	G	60	75	Y		Y				Y	Y		75%	Y	Y	75%
5.3.2 How well is the infrastructure maintained? (N: None, I: infrequent,D: demand,P: planned)		D	D	P	P	D	D	D	D	P	60	75	Y	Y					Y	Y		75%	Y	Y	75%
5.3.3 Are spare parts readily available? (Yes/No)		Y	Y	Y	Y	N	N	Y	N	Y	60	75	Y	Y					Y	Y		75%	Y	Y	75%
5.3.4 Number of breakages / failures per year		3	0	0	2	3	0	315	65	0	60	75	Y	Y					Y	Y		75%	Y	Y	75%
5.3.5 Total refurbishment needs %		48	0	2	0	35	0	69	0	8	60	75	Y	Y					Y	Y		75%	Y	Y	75%
5.3.6 Total refurbishment needs cost (RM)		1.2	0	2	0	7	0	50	0	2.5	60	75	Y	Y					Y	Y		75%	Y	Y	75%
5.3.7 Total replacement needs %		0	0	0	1	75	0	0	0	0	60	75	Y	Y					Y	Y		75%	Y	Y	75%
5.3.8 Total replacement needs cost (RM)		0	0	0	5	15	0	0	0	0	60	75	Y	Y					Y	Y		75%	Y	Y	75%
Sub Topic 5.3 Compliancy & Needs Development Plans Assessment											60%	75%										1%			1%
5.4 Institutional Status																									
5.4.1 % whereoff the WSA Self is the Current Owner		100	100	100	100	100	100	100	100	100	60	75	Y	Y					Y	Y		75%	Y	Y	75%
5.4.2 % whereoff the WSA Self is Current Operator		100	100	100	100	100	100	100	100	100	60	75	Y	Y					Y	Y		75%	Y	Y	75%
Sub Topic 5.4 Compliancy & Needs Development Plans Assessment											60%	75%										1%			1%
5.5 Asset Assessment Spectrum																									
5.5.1 % Expected total lifespan: Short (1-3 yrs)		40	0	20	40	40	10	50	0	20	50	50	Y	Y					Y	Y		75%	Y	Y	75%
5.5.2 % Expected total lifespan: Medium (3 - 10 yrs)		20	0	40	20	20	50	20	0	10	50	50	Y	Y	Y				Y	Y		75%	Y	Y	75%
5.5.3 % Expected total lifespan: Long (10 - 20 yrs)		40	0	40	40	40	40	30	0	70	50	50	Y	Y		Y			Y	Y		75%	Y	Y	75%
* 5.5.4 Estimated replacement value (RM)		2.5	0.5	100	5	20	20	72	38	30	50	50	Y	Y	Y				Y	Y		75%	Y	Y	75%
* 5.5.5 Annual operating cost (RM)		0.15	0.15	0.4	0.15	0	0	0	0	0.1	50	50	Y	Y	Y				Y	Y		75%	Y	Y	75%
* 5.5.6 Annual maintenance cost (RM)		0.15	0.15	0.25	0.15	0.08	0	0.2	0.1	0.1	50	50	Y	Y	Y				Y	Y		75%	Y	Y	75%
Sub Topic 5.5 Compliancy & Needs Development Plans Assessment											50%	50%										1%			1%
5.6 Type and Capacity																									
5.6.1 Capacity (m^3)			0	0	0	0	0	0		0			Y		Y				Y	Y		75%	Y	Y	75%
5.6.2 Full Supply storage capacity (m^3)			0				0						Y		Y				Y	Y		75%	Y	Y	75%
5.6.3 Spillway capacity (m^3/sec)			0										y		y		y		y	y		75%	Y	Y	75%

Enabling Factors	Compliancy											Needs Development Plan					
	Status Quo											Future plan (to adress issues)				Strategy	
													Time Frame	Sufficient for			

General Notes: The Enabling Factors below must be completed for the appropriate component as marked in yellow within the Compliancy section. All factors must be assessed and the Needs Development Plan section completed	Groundwater	Surface water	WTW	Pumpstations	Bulk pipeline	Reservoirs	Reticulation	Water Borne	WWTW	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment													1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness	Yes/No									%	%	Yes/No/N.A.								%	Yes/No		%
5.6.4 Total annual assured yield (m^3/annum) 70% van onttrekking	211ML	2.2milj								60	50	y	y					y	y	75%	y	y	75%
5.6.5 Can the (dam) capacity be increased? (Yes/No)		NA								60	50	y	y					y	y	75%	y	y	75%
5.6.6 Physical water quality: Turbidity		60	1							60	50	y	y					y	y	75%	y	y	75%
5.6.7 Chemical causing quality problem			15.8ML							60	50	y	y					y	y	75%	y	y	75%
5.6.8 Design Capacity (Mega L)			Y							60	50												
5.6.9 Discharge rate (Mega L/day)				80						60	50												
5.6.10 Pipe material (Most common)					asbes					60	50												
5.6.11 Avg. Diameter (mm)					250					60	50	y	y					y	y	75%	y	y	75%
5.6.12 Avg. Discharge rate (L/sec)					60					60	50	y	y					y	y	75%	y	y	75%
5.6.13 How much capacity is still available for development? (%)	0	100	45	5	10	10	10	40	50	60	50	y	y					y	y	75%	y	y	75%
5.6.14 Design Capacity - Hydraulic Load (Ml/day)									793	60	50	y	y					y	y	75%	y	y	75%
5.6.15 Design Capacity - Organic Load (COD kg/day)									NA	60	50	y	y					y	y	75%	y	y	75%
Sub Topic 5.6 Compliancy & Needs Development Plans Assessment										48%	40%									1%			1%

Comments Information is available at the municipality. Short and meduim planning is in place. Infrastructure is utilized under capasity and there is ample room for expention. Marydale water network must be inspected. Borehole yields must also be investigated.

Topic 5: Water Services Infrastructure Profile

5

Enabling Factors		Compliancy											Needs Development Plan											
		Status Quo											Future plan (to adress issues)								Strategy			
General Notes: The Enabling Factors below must be completed for the appropriate component as marked in yellow within the Compliancy section. All factors must be assessed and the Needs Development Plan section completed		Groundwater	Surface water	WTW	Pumpstations	Bulk pipeline	Reservoirs	Reticulation	Water Borne	WWTW	ASSESSMENT	ASSESSMENT	In place?	Time Frame: Short (1) Medium (3) Long (5) None				Sufficient for: RDP *	Higher Level *	Growth & Development *	ASSESSMENT	In place?	Sufficient	ASSESSMENT
														1	3	5	N							
Quality: Information Accuracy Assessment		Yes/No									%	%	Yes/No								%	Yes/No		%
Quantity: Assessment of Information Completeness																								
* 5.7 Existing Asset Management Assessment																								
* RESOURCE	Staff	N	N	y	N	N	N	y	N	N	60%	50%	y		Y				Y	Y	30%	Y	Y	30%
	External resources	y	y	y	y	y	y	y	y	y	60%	50%	y		Y				Y	Y	30%	Y	Y	30%
	Materials	y	y	y	y	y	y	y	y	y	60%	50%	y		Y				Y	Y	30%	Y	Y	30%
	Tools & Equipment	y	y	y	y	y	y	y	y	y	60%	50%	y		Y				Y	Y	30%	Y	Y	30%
	Transport	y	y	y	y	y	y	y	y	y	60%	50%	y		Y				Y	Y	30%	Y	Y	30%
	Budget	y	y	y	y	y	y	y	y	y	60%	50%	y		Y				Y	Y	30%	Y	Y	30%
* INFORMATION	Manuals	y	y	y	y	y	y	y	y	y	60%	50%	N		Y				Y	Y	30%	N	N	30%
	As-built information	N	y	y	y	N	y	N	y	y	60%	50%	N		Y				Y	Y	30%	N	N	30%
	Safety plan	N	N	N	N	N	N	N	N	N	60%	50%	N		Y				Y	Y	30%	N	N	30%
* ACTIVITY CONTROL	Procedures	N	N	N	N	N	N	N	N	N	60%	50%	Y		Y				Y	Y	30%	Y	Y	30%
	Record keeping	y	y	y	y	y	y	y	y	y	60%	50%	Y		Y				Y	Y	30%	Y	Y	30%
	Quality control	N	N	N	N	N	N	N	N	N	60%	50%	Y		Y				Y	Y	30%	Y	Y	30%
* MANAGEMENT	Risk management	N	N	N	N	N	N	N	N	N	60%	50%	Y		Y				Y	Y	30%	Y	Y	30%
	Reporting	y	y	y	y	y	y	y	y	y	60%	50%	Y		Y				Y	Y	30%	Y	Y	30%
* WATER MASTER PLAN	That Addresses:	y	y	y	N	N	N	N	N	N	60%	50%	Y		Y				Y	Y	30%	Y	Y	30%
Sub Topic 5.7 Compliancy & Needs Development Plans Assessment											1%	1%									0%			0%

OVERALL TOPIC ASSESSMENT

5.1 General Information	1%	0%
5.2 Operation	6%	7%
5.3 Functionality	60%	75%
5.4 Institutional Status	60%	75%
5.5 Asset Assessment Spectrum	50%	50%
5.6 Type and Capacity	48%	40%
5.7 Existing Asset Management Assessment	1%	1%

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	0%
Strategy	0%

OVERALL QUALITY ASSESSMENT	32%
OVERALL QUANTITY ASSESSMENT	35%

Topic 6: Operation & Maintenance

Enabling Factors	Compliancy												Needs Development Plan											
	Status Quo												Future plan (to adress issues)									Strategy		
														Time Frame				Sufficient for						
STATUS QUO (S) Z - Zero Compliance 1 - Below minimum requirement 2 - Minimum basic requirement 3 - Above minimum requirement N/R Not Required IMPACT (I) C - Critical M - Mediumal/High L - Low No - No Impact	Staff		External resources		Spare Parts		Tools & Equipment		Budget		ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment																		*	*	*				
Quantity: Assessment of Information Completeness	S	I	S	I	S	I	S	I	S	I				1	3	5	N							
* 6.1 IS THERE A OPERATION & MAINTENANCE PLAN? Yes/No											%	%	Yes/No/N.A.								%	Yes/No		%
6.2 WATER SERVICES INFRASTRUCTURE: OPERATIONAL ASSESSMENT																								
6.2.1 Resources																								
6.2.1.1 Existing Groundwater Infrastructure	2	M	2	M	3	M	3	M	3	M	60	50%	Y	Y					Y	Y		Y	Y	30
6.2.1.2 Existing Surface water Infrastructure	2	M	2	M	3	M	3	M	3	M	60	50%	Y	Y					Y	Y		Y	Y	30
6.2.1.3 Existing Water Treatement Works Infrastructure	1	C	2	M	2	M	2	M	1	M	60	50%	Y	Y					Y	Y		Y	Y	30
6.2.1.4 Existing Pump Station Infrastructure	1	M	2	M	2	M	2	M	3	M	60	50%	Y	Y					Y	Y		Y	Y	30
6.2.1.5 Existing Bulk Pipeline Infrastructure	2	M	2	M	1	M	2	L	2	L	60	50%	Y	Y					Y	Y		Y	Y	30
6.2.1.6 Existing Tower & Reservoir Infrastructure	2	M	2	M	1	M	2	L	2	L	60	50%	Y	Y					Y	Y		Y	Y	30
6.2.1.7 Existing Reticulation Infrastructure	2	M	2	M	1	M	2	L	2	L	60	50%	Y	Y					Y	Y		Y	Y	30
	Status Quo												Future plan (to adress issues)									Strategy		
														Time Frame				Sufficient for						
	Manuals Available		Asset Register		As-Built Info.		Tools & Equipment		Contingency & Safety Plan		ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
	S	I	S	I	S	I	S	I	S	I				1	3	5	N	*	*	*				
6.2.2 Information																								
6.2.2.1 Existing Groundwater Infrastructure	1	M	3	M	2	M	2	M	1	M	60%	50%	Y	Y					Y	Y		Y	Y	30%
6.2.2.2 Existing Surface water Infrastructure	1	M	2	M	3	M	2	M	1	M	60%	50%	Y	Y					Y	Y		Y	Y	30%
6.2.2.3 Existing Water Treatement Works Infrastructure	2	M	3	M	3	M	3	M	2	M	60%	50%	Y	Y					Y	Y		Y	Y	30%
6.2.2.4 Existing Pump Station Infrastructure	1	M	2	M	2	M	2	M	1	M	60%	50%	Y	Y					Y	Y		Y	Y	30%
6.2.2.5 Existing Bulk Pipeline Infrastructure	1	M	2	M	2	M	2	M	1	M	60%	50%	Y	Y					Y	Y		Y	Y	30%
6.2.2.6 Existing Tower & Reservoir Infrastructure	1	M	2	M	2	M	1	M	1	M	60%	50%	Y	Y					Y	Y		Y	Y	30%
6.2.2.7 Existing Reticulation Infrastructure	2	M	2	M	2	M	2	M	1	M	60%	50%	Y	Y					Y	Y		Y	Y	30%

	Status Quo												Future plan (to adress issues)									Strategy		
														Time Frame				Sufficient for						
STATUS QUO (S) / **IMPACT (I)**	Procedures		Record keeping in place		Quality control procedures establ.		Risk Management		Reporting (data analysis & report generation establ.		ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Z - Zero Compliance / 1 - Below minimum requirement / 2 - Minimum basic requirement / 3 - Above minimum requirement / N/R Not Required														1	3	5	N	*	*	*				
C - Critical / M - Mediumal/High / L - Low / No - No Impact																								
Quality: Information Accuracy Assessment																								
Quantity: Assessment of Information Completeness	S	I	S	I	S	I	S	I	S	I														
											%	%	Yes/No/N.A.								%	Yes/No		%
6.2.3 Activity Control & Management																								
6.2.3.1 Existing Groundwater Infrastructure	1	C	1	M	2	M	1	M	1	M	60%	50%	Y		Y				Y	Y	75%	Y	Y	75%
6.2.3.2 Existing Surface water Infrastructure	2	M	2	M	2	M	1	M	2	M	60%	50%	Y		Y				Y	Y	75%	Y	Y	75%
6.2.3.3 Existing Water Treatement Works Infrastructure	2	M	2	M	2	M	1	M	2	M	60%	50%	Y		Y				Y	Y	75%	Y	Y	75%
6.2.3.4 Existing Pump Station Infrastructure	1	M	2	M	2	M	1	M	2	M	60%	50%	Y		Y				Y	Y	75%	Y	Y	75%
6.2.3.5 Existing Bulk Pipeline Infrastructure	2	M	1	M	1	M	1	M	2	M	60%	50%	Y		Y				Y	Y	75%	Y	Y	75%
6.2.3.6 Existing Tower & Reservoir Infrastructure	1	M	2	M	1	M	1	M	1	M	60%	50%	Y		Y				Y	Y	75%	Y	Y	75%
6.2.3.7 Existing Reticulation Infrastructure	2	M	2	M	2	M	1	M	2	M	60%	50%	Y		Y				Y	Y	75%	Y	Y	75%
Sub Topic 6.2 Compliancy & Needs Development Plans Assessment											20%	1%									0%			10%

Comments

Shortfall of finances and skills

	Status Quo							Future plan (to adress issues)				Strategy		
									Time Frame	Sufficient for				

STATUS QUO (S)	IMPACT (I)
Z - Zero Compliance	C - Critical
1 - Below minimum requirement	M - Mediumal/High
2 - Minimum basic requirement	L - Low
3 - Above minimum requirement	No - No Impact
N/R Not Required	

Quality: Information Accuracy Assessment	Staff		External resources		Spare Parts		Tools & Equipment		Budget		ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quantity: Assessment of Information Completeness														1	3	5	N	*	*	*				
	S	I	S	I	S	I	S	I	S	I														
6.3 WATER SERVICES INFRASTRUCTURE: MAINTENANCE ASSESSMENT											%	%	Yes/No/N.A.								%	Yes/No		%
6.3.1 Resources																								
6.3.1.1 Existing Groundwater Infrastructure	2	M	2	M	3	M	3	M	3	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.1.2 Existing Surface water Infrastructure	2	M	2	M	3	M	3	M	3	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.1.3 Existing Water Treatement Works Infrastructure	1	C	2	M	2	M	2	M	1	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.1.4 Existing Pump Station Infrastructure	1	M	2	M	2	M	2	M	3	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.1.5 Existing Bulk Pipeline Infrastructure	2	M	2	M	1	M	2	L	2	L	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.1.6 Existing Tower & Reservoir Infrastructure	2	M	2	M	1	M	2	L	2	L	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.1.7 Existing Reticulation Infrastructure	2	M	2	M	1	M	2	L	2	L	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.2 Information																								
6.3.2.1 Existing Groundwater Infrastructure	1	M	3	M	2	M	2	M	1	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.2.2 Existing Surface water Infrastructure	1	M	2	M	3	M	2	M	1	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.2.3 Existing Water Treatement Works Infrastructure	2	M	3	M	3	M	3	M	2	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.2.4 Existing Pump Station Infrastructure	1	M	2	M	2	M	2	M	1	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.2.5 Existing Bulk Pipeline Infrastructure	1	M	2	M	2	M	2	M	1	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.2.6 Existing Tower & Reservoir Infrastructure	1	M	2	M	2	M	1	M	1	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%
6.3.2.7 Existing Reticulation Infrastructure	2	M	2	M	2	M	2	M	1	M	50%	75%	Y	Y				Y	Y	Y	30%	Y	Y	30%

Siyathemba LOCAL MUNICIPALITY **WSDP: 20__**

Topic 6: Operation & Maintenance

6

Enabling Factors		Compliancy												Needs Development Plan											
		Status Quo												Future plan (to adress issues)									Strategy		
STATUS QUO (S)	IMPACT (I)	Manuals Available		Asset Register		As-Built Info.		Tools & Equipment		Contingency & Safety Plan		ASSESSMENT	ASSESSMENT	In place?	Time Frame: Short (1) Medium (3) Long (5) None				Sufficient for: RDP *	Higher Level *	Growth & Development *	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Z - Zero Compliance	C - Critical														1	3	5	N							
1 - Below minimum requirement	M - Mediumal/High																								
2 - Minimum basic requirement	L - Low																								
3 - Above minimum requirement	No - No Impact																								
N/R Not Required																									
Quality: Information Accuracy Assessment		S	I	S	I	S	I	S	I	S	I														
Quantity: Assessment of Information Completeness																									
												%	%	Yes/No/N.A.								%	Yes/No	Yes/No	%
6.3.3. Activity Control & Management																									
6.3.3.1 Existing Groundwater Infrastructure		1	C	1	M	2	M	1	M	1	M	60%	75%	Y	Y				Y	Y	Y	75%	Y	Y	75%
6.3.3.2 Existing Surface water Infrastructure		2	M	2	M	2	M	1	M	2	M	60%	75%	Y	Y				Y	Y	Y	75%	Y	Y	75%
6.3.3.3 Existing Water Treatement Works Infrastructure		2	M	2	M	2	M	1	M	2	M	60%	75%	Y	Y				Y	Y	Y	75%	Y	Y	75%
6.3.3.4 Existing Pump Station Infrastructure		1	M	2	M	2	M	1	M	2	M	60%	75%	Y	Y				Y	Y	Y	75%	Y	Y	75%
6.3.3.5 Existing Bulk Pipeline Infrastructure		2	M	1	M	1	M	1	M	2	M	60%	75%	Y	Y				Y	Y	Y	75%	Y	Y	75%
6.3.3.6 Existing Tower & Reservoir Infrastructure		1	M	2	M	1	M	1	M	1	M	60%	75%	Y	Y				Y	Y	Y	75%	Y	Y	75%
6.3.3.7 Existing Reticulation Infrastructure		2	M	2	M	2	M	1	M	2	M	60%	75%	Y	Y				Y	Y	Y	75%	Y	Y	75%
Sub Topic 6.3 Compliancy & Needs Development Plans Assessment												1%	1%									0%			0%
*** 6.4 Water Supply Quality**	In Place Yes / No																								
6.4.1 Water Safety Plan	N											60%	75%									10%			10%
6.4.2 Process Control	N											60%	75%									10%			10%
6.4.3 Monitoring Programme	Y											60%	75%									30%			30%
6.4.4 Sample Analysis (Credible) 1 Eskom Enterprises	Y											60%	75%									30%			30%
2																									
3																									
4																									
5																									
6.4.5 Failure Response Management	Y											60%	75%									30%			30%
Sub Topic 6.4 Compliancy & Needs Development Plans Assessment												0%	1%									0%			0%

6

Topic 6: Operation & Maintenance

Enabling Factors	Compliancy		Needs Development Plan	
	Status Quo		Future plan (to adress issues)	Strategy
OVERALL TOPIC ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT
Quality: Information Accuracy Assessment				
Quantity: Assessment of Information Completeness				

	%	%
6.1 OPERATION & MAINTENANCE PLAN	20%	1%
6.2 WATER SERVICES INFRASTRUCTURE: OPERATIONAL ASSESSMENT	1%	1%
6.3 WATER SERVICES INFRASTRUCTURE: MAINTENANCE ASSESSMENT	0%	1%
6.4 WATER SUPPLY QUALITY		

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	0%
Strategy	4%

OVERALL QUALITY ASSESSMENT	7%
OVERALL QUANTITY ASSESSMENT	1%

SALGA

* BASELINE INFORMATION: COMPULSARY FIELDS

Topic 7: Associated Services

7

Enabling Factors	Status Quo								Needs Development Plan											
									Future plan (to adress issues)								Strategy			
										Time Frame				Sufficient for						
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):	Budget	Tools & Equipment	Personnel	Gazetted	Adequate for Basic Services	Adequate for Higher Level Services	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
										1	3	5	N	*	*	*				
Quality: Information Accuracy Assessment																				
Quantity: Assessment of Information Completeness																				
7.1 Water Services	Yes/No						%	%	Yes/No/N.A.								%	Yes/No		%
Associated Services Facility	**Number of facilities**	**Facilities with adequate services**	**Facilities with no services**	**Facilities with inadequate services**	**Total Potential cost (basic level) (RM)**															
7.1.1 Education Plan																				
* Schools			0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
Tertiary education facility	0	0	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
Total																									
*** 7.1.2 Health Plan**																									
* Hospitals	1	1	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
* Health centres	0	0	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
* Clinics	4	4	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
Total																									
Sub Topic 7.1 Compliancy & Needs Development Plans Assessment												1%	1%									0%			0%
7.2 Sanitation Services																									
7.2.1 Education Plan																									
* Schools			0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
Tertiary education facility	0	0	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
Total																									
*** 7.2.2 Health Plan**																									
* Hospitals	1	1	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
* Health centres	0	0	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
* Clinics	4	4	0	0	0	N	N	N	N	N	N	60%	75%	N				N				10%	N	N	10%
Total																									
Sub Topic 7.2 Compliancy & Needs Development Plans Assessment												1%	1%									0%			0%

7

Topic 7: Associated Services

Enabling Factors		Needs Development Plan		
	Status Quo	Future plan (to adress issues)		Strategy

OVERALL TOPIC ASSESSMENT

	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT
Quality: Information Accuracy Assessment				
Quantity: Assessment of Information Completeness				
7.1 WATER SERVICES	1%	1%		
7.2 SANITATION SERVICES	1%	1%		

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	0%
Strategy	0%

OVERALL QUANTITY ASSESSMENT	1%
OVERALL QUALITY ASSESSMENT	1%

Topic 8: Conservation & Demand Management

8

Enabling Factors	Status Quo										Needs Development Plan												
											Future plan (to adress issues)										Strategy		
												Time Frame				Sufficient for							
	Budget	Tools & Equipment	Personnel	Gazetted	Urban Settlements		Rural Settlements		ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment																						
Quantity: Assessment of Information Completeness					Current	Previous	Current	Previous				1	3	5	N	*	*	*				
8.1 Water Resource Management Interventions	Resources available to perform function? (Yes: Y, No: N, Partially: P,				Occuring? / Yes/No / Number Of				%	%	Yes/No/N.A.								%	Yes/No		%
*** 8.1.1 Reducing unaccounted water and water inefficiencies**	Yes/No																					
8.1.1.1 Reticulation leaks	N	Y	Y	Y	120	N/A	65	N/A	60%	50%	Y	Y					Y	Y	10%	Y	N	10%
8.1.1.2 Illegal connections	N	Y	Y	Y	N	N	N	N	60%	50%	Y	Y					Y	Y	10%	Y	N	10%
8.1.1.3 Un-metered connections	N	Y	Y	Y	N	N	N	N	60%	50%	Y	Y					Y	Y	10%	Y	N	10%
8.1.1.4 Internal plumbing leaks	N	N	N	N	N	N	N	N	60%	50%	Y	Y					Y	Y	10%	Y	N	10%
*** 8.1.2 Reducing high pressures for residential consumers** **Number of consumer units with water supply pressure of:**	Number Of																					
8.1.2.1 <300kPa	N/A	N/A	N/A	N/A	N/A	N/A			60%	50%												
8.1.2.2 300 -600kPa	N/A	N/A	N/A	N/A	N/A	N/A			60%	50%												
8.1.2.3 600 -900kPa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60%	50%	N				N				0%	N	N	0%
8.1.2.4 >900kPa (>9Bar)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60%	50%	N				N				0%	N	N	0%
*** 8.1.3 Leak and meter repair programmes** **Consumer units targeted by:**	Number Of																					
8.1.3.1 Leak repair assistance programme	N	Y	Y	N	N	N	N	N	60%	50%	N				N				0%	N	N	0%
8.1.3.2 Retro-fitting of water efficient toilets	N	N	N	N	N	N	N	N	60%	50%	N				N				0%	N	N	0%
8.1.3.3 Meter repair programme	Y	Y	Y	Y	960	N/A	280	N/A	60%	50%	N				N				0%	N	N	0%
8.1.4 Consumer/end-use demand management: Public Information & Education Programmes	%																					
8.1.4.1 % Schools targeted by education programmes	N	N	N		N	N	N	N	60%	50%	N	N	N	N	N	N	N	N	0%	N	N	0%
8.1.4.2 % Consumers targeted by public information programmes	N	N	N		N	N	N	N	60%	50%	N	N	N	N	N	N	N	N	0%	N	N	0%

8

Topic 8: Conservation & Demand Management

Enabling Factors						Needs Development Plan											
	Status Quo					Future plan (to adress issues)										Strategy	
							Time Frame				Sufficient for						
	Number of Settlements	Artificial Recharge	Rain Water Harvesting	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5)				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment																	
Quantity: Assessment of Information Completeness							1	3	5	N	*	*	*				
	Number of	%	%	%	%	Yes/No/N.A.								%	Yes/No		%
8.1.5 Conjunctive use of surface - and groundwater																	
Ground Water	2	0	N/A	60%	75%												
Surface Water	1	0	N/A	60%	75%												
Conjuctive Use	0	0	N/A	60%	75%												
8.1.6 Working for Water	Is there a Working for Water Programme in Place: Yes/No																
Provide List of Projects:																	
1) N/A																	
2)																	
3)																	
4)																	
5)																	
6)																	
7)																	
Sub Topic 8.1 Compliancy & Needs Development Plans Assessment				0%	0%									0%			0%

Comments

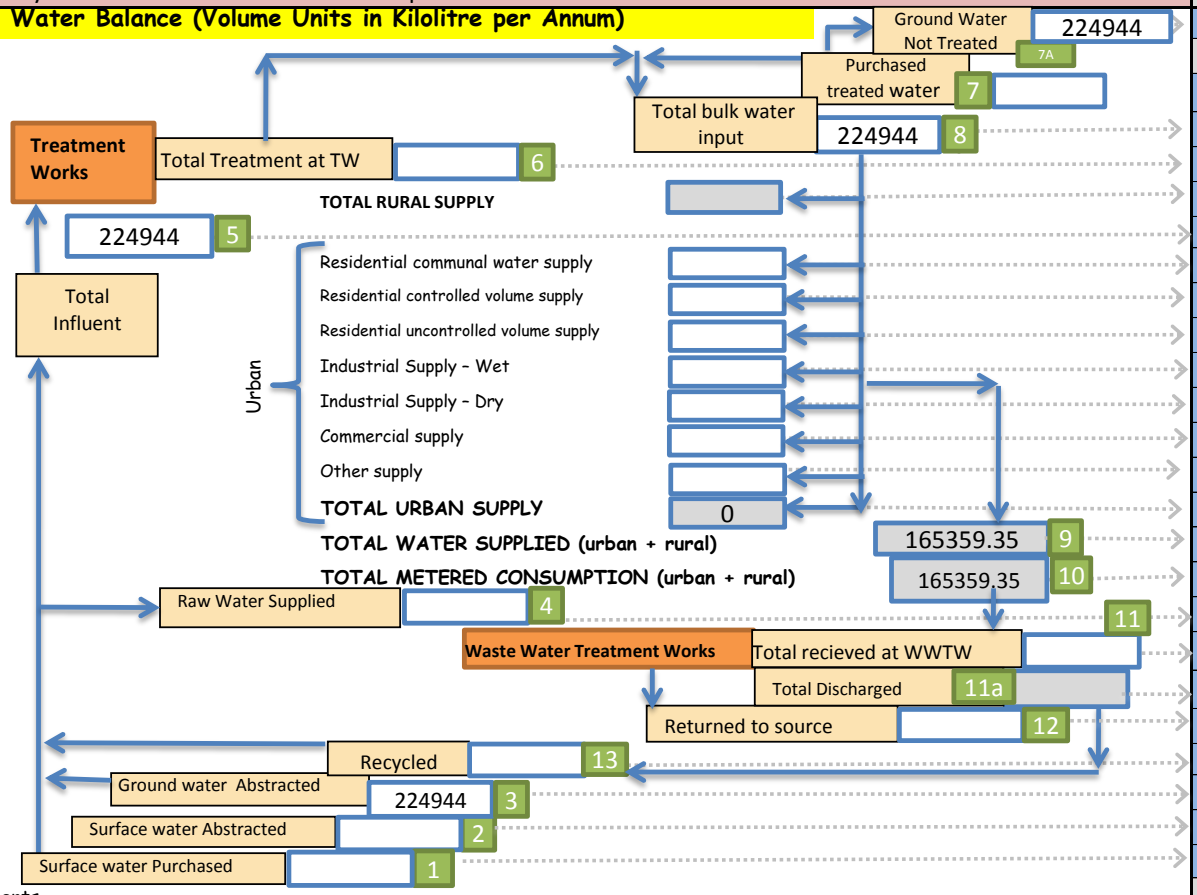
Surface water - Prieska only

Normal water - Marydale, Niekershoop

Topic 8: Conservation & Demand Management

8

Enabling Factors	Compliancy	Needs Development Plan														
General Notes: The compliancy and needs development plan section must be completed for each aspect listed	Status Quo	Future plan (to adress issues)											Strategy			
			Time Frame				Sufficient for									
TOTAL: 1 of 3		In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT			
System Name: MARYDALE Must be completed for Total. If required this page can be completed in multi copies to list and describe more than one system			1	3	5	N	*	*	*							
Quality: Information Accuracy Assessment																
Quantity: Assessment of Information Completeness	ASSESSMENT %	ASSESSMENT %	Yes/No/N.A.								%	Yes/No		%		
8.2 Water Balance (Volume Units in Kilolitre per Annum)	50	50	Y	Y				Y	Y	Y	50	Y	N	50		

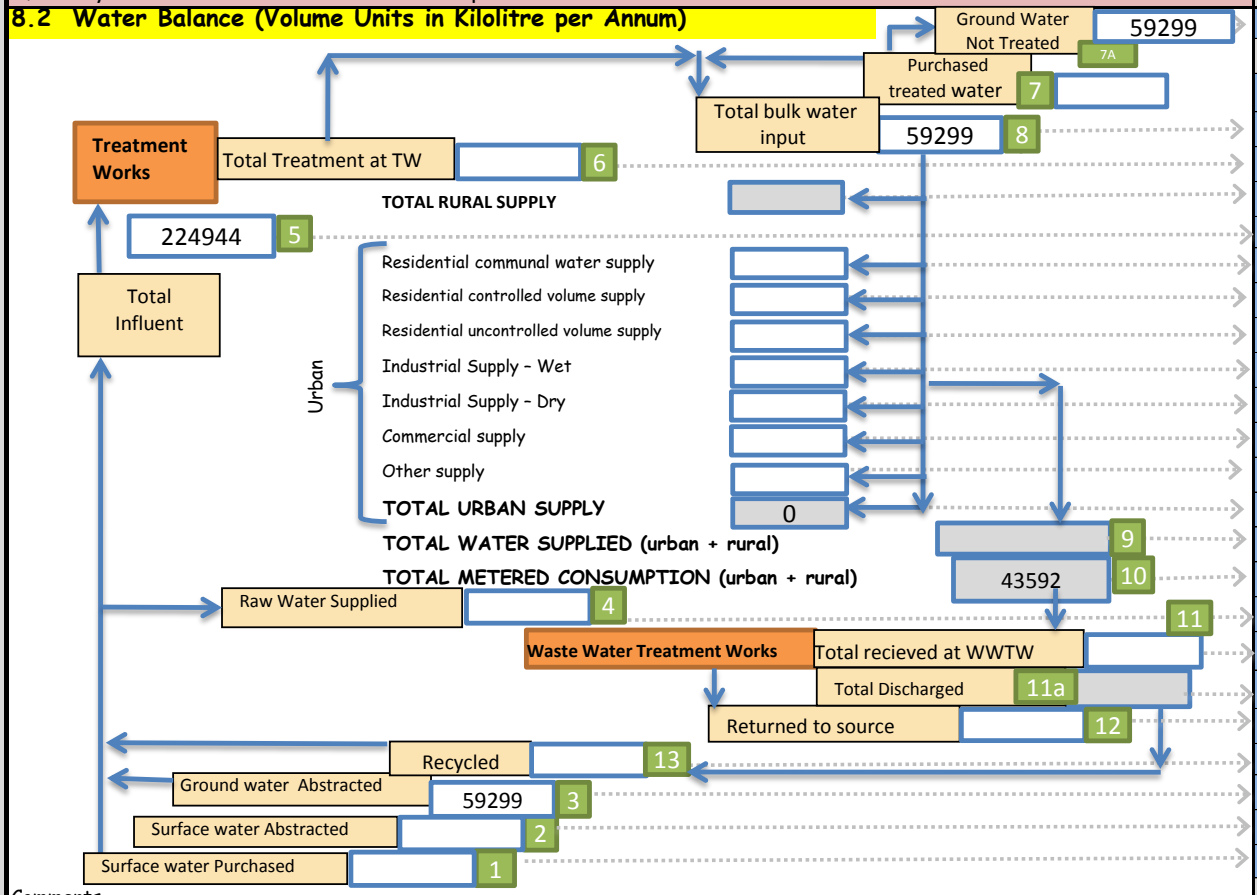


	50	50	Y	Y				Y	Y	Y	50	Y	N	50			

Topic 8: Conservation & Demand Management

8

Enabling Factors	Compliancy	Needs Development Plan														
General Notes: The compliancy and needs development plan section must be completed for each aspect listed	Status Quo	Future plan (to adress issues)											Strategy			
			Time Frame				Sufficient for									
TOTAL: 2 of 3		In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
System Name: NIEKERKSHOOP Must be completed for Total. If required this page can be completed in multi copies to list and describe more than one system			1	3	5	N	*	*	*				
Quality: Information Accuracy Assessment																
Quantity: Assessment of Information Completeness	%	%	Yes/No/N.A.							%	Yes/No		%
8.2 Water Balance (Volume Units in Kilolitre per Annum)	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
	50	50	Y	Y				Y	Y	Y	50	Y	N	50
Comments														
Sub Topic 8.2 Compliancy & Needs Development Plans Assessment	50%	50%								50%			50%



Topic 8: Conservation & Demand Management

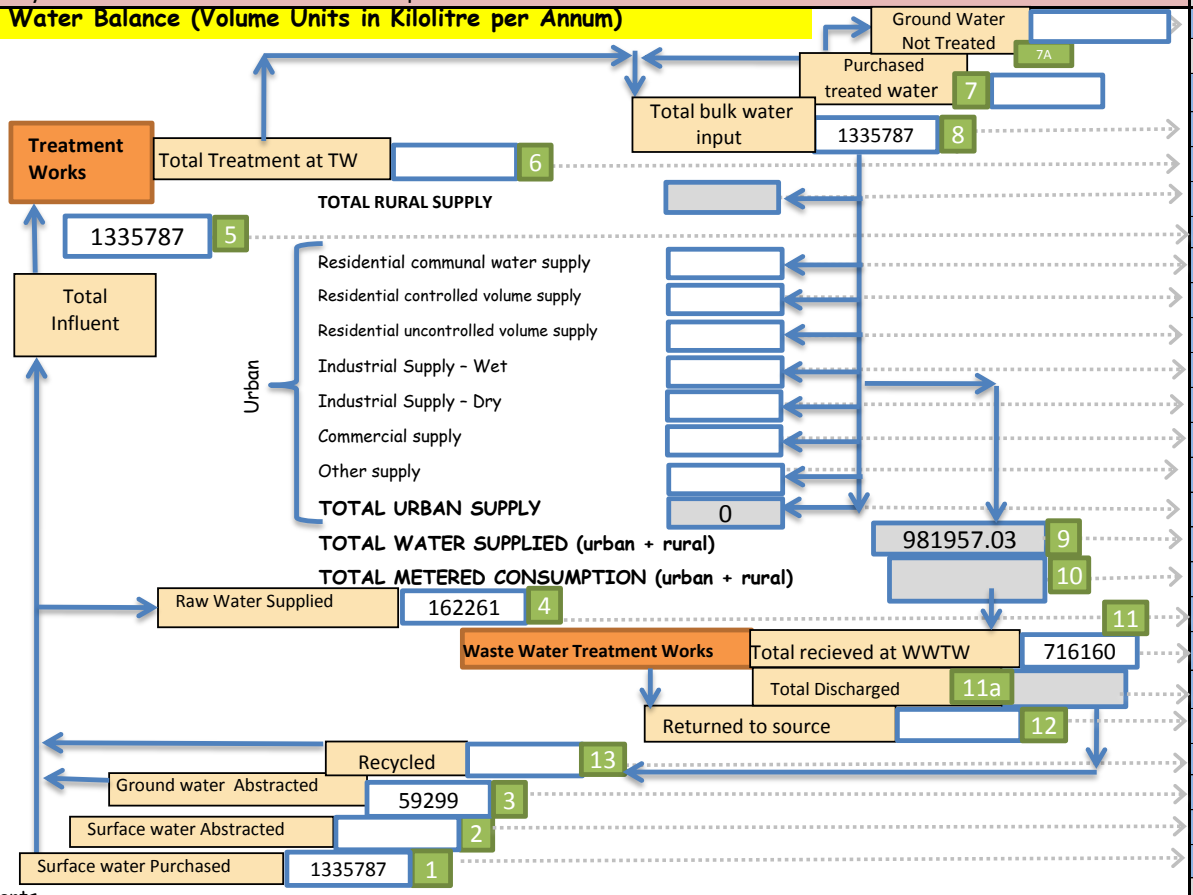
8

Enabling Factors	Compliancy	Needs Development Plan
General Notes: The compliancy and needs development plan section must be completed for each aspect listed	Status Quo	Future plan (to adress issues)

TOTAL: 3 of 3

System Name: PRIESKA Must be completed for Total. If required this page can be completed in multi copies to list and describe more than one system

Quality: Information Accuracy Assessment	ASSESSMENT	ASSESSMENT	In place?	Time Frame: Short (1) Medium (3) Long (5) None				Sufficient for: RDP *	Higher Level *	Growth & Development *	ASSESSMENT	In place?	Sufficient	ASSESSMENT	Strategy
				1	3	5	N								
Quantity: Assessment of Information Completeness	%	%	Yes/No/N.A.								%	Yes/No		%	
8.2 Water Balance (Volume Units in Kilolitre per Annum)	50	50	Y	Y				Y	Y	Y	50	Y	N	50	



	50	50	Y	Y				Y	Y	Y	50	Y	N	50	
	50	50	Y	Y				Y	Y	Y	50	Y	N	50	
	50	50	Y	Y				Y	Y	Y	50	Y	N	50	
	50	50	Y	Y				Y	Y	Y	50	Y	N	50	
	50	50	Y	Y				Y	Y	Y	50	Y	N	50	
	30	30

8

Topic 8: Conservation & Demand Management

Enabling Factors	Compliancy	Needs Development Plan														
General Notes: The compliancy and needs development plan section must be completed for each aspect listed	Status Quo	Future plan (to adress issues)											Strategy			
					Time Frame				Sufficient for							
	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				Basic	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
				1	3	5	N	*	*	*				
Quality: Information Accuracy Assessment														
Quantity: Assessment of Information Completeness	%	%	Yes/No/N.A.								%	Yes/No		%

TOTAL: 1 OF 3

System Name: MARYDALE Must be completed for Total. If required this page can be completed in multi copies to list and describe more than one system

8.3 Water Losses

8.3.1 - Raw Water Bulk Loss

Received Treated Water	-	Total Raw Water Bulk Received	-	Raw Water Supplied		
5	-	(1+2+3+13)	-	-4		
224944	-	224944	-	0	=	449887

ASSESSMENT	ASSESSMENT	In place?					Basic	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.2 - Treated Water Loss :Bulk

Total Supplied	-	(Total Treated at Treated Water + Purchased Treated Water) + Ground Water Not Treated		
8	-	(6+7+7a)		
224944	-	224944	=	0

ASSESSMENT	ASSESSMENT	In place?					Basic	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.3 - Treated Water Loss :Internal

Metered Consumption	-	Total Bulk Water Input		
10	-	8		
165359	-	224944	=	-59585

ASSESSMENT	ASSESSMENT	In place?					Basic	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.4 - Water Balance

Bulk Input		Usage	+	Discharged	
(1+2+3+7)-4	-	[(8-11)	+	11a]	Value
224944	-	224944		0	0

ASSESSMENT	ASSESSMENT	In place?					Basic	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
30	30	Y	Y				Y	Y	Y	30	N	Y	50

Sub Topic 8.3 Compliancy & Needs Development Plans Assessment	30%	30%									30%			50%

8 Topic 8: Conservation & Demand Management

Enabling Factors	Compliancy	Needs Development Plan																
General Notes: The compliancy and needs development plan section must be completed for each aspect listed	Status Quo			Future plan (to adress issues)										Strategy				
					Time Frame				Sufficient for									
TOTAL: 2 OF 3					Short (1) Medium (3) Long (5) None													
System Name: NIEKERKSHOOP Must be completed for Total. If required this page can be completed in multi copies to list and describe more than one system		ASSESSMENT	ASSESSMENT	In place?	1	3	5	N	Basic *	Higher Level *	Growth & Development *	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment															
Quantity: Assessment of Information Completeness		%	%	Yes/No/N.A.								%	Yes/No		%

8.3 Water Losses

8.3.1 - Raw Water Bulk Loss

Received Treated Water	-	Total Raw Water Bulk Received	-	Raw Water Supplied														
5	-	(1+2+3+13)	-	-4														
0	-	59299	-	0	=	59299	30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.2 - Treated Water Loss :Bulk

Total Supplied	-	(Total Treated at Treated Water + Purchased Treated Water) + Ground Water Not Treated																
8	-	(6+7+7a)																
59299	-	59299	=	0	30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.3 - Treated Water Loss :Internal

Metered Consumption	-	Total Bulk Water Input																
10	-	8																
43592	-	59299	=	-15707	30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.4 - Water Balance

Bulk Input		Usage	+	Discharged														
(1+2+3+7)-4	-	[(8-11)	+	11a]	Value													
59299	-	59299	+	0	0	30	30	Y	Y				Y	Y	Y	30	N	Y	50

Sub Topic 8.3 Compliancy & Needs Development Plans Assessment	30%	30%									30%			50%

8 **Topic 8: Conservation & Demand Management**

Enabling Factors	Compliancy	Needs Development Plan
General Notes: The compliancy and needs development plan section must be completed for each aspect listed	Status Quo	Future plan (to adress issues) / Strategy

TOTAL: 3 OF 3

System Name: PRIESKA Must be completed for Total. If required this page can be completed in multi copies to list and describe more than one system

Quality: Information Accuracy Assessment

Quantity: Assessment of Information Completeness

	ASSESSMENT	ASSESSMENT	In place?	Time Frame: Short (1) Medium (3) Long (5) None				Sufficient for: Basic *	Higher Level *	Growth & Development *	ASSESSMENT	In place?	Sufficient	ASSESSMENT
				1	3	5	N							
	%	%	Yes/No/N.A.								%	Yes/No		%

8.3 Water Losses

8.3.1 - Raw Water Bulk Loss

Received Treated Water	-	Total Raw Water Bulk Received	-	Raw Water Supplied		
5	-	(1+2+3+13)	-	-4		
1335787	-	1335787	-	162261	=	2509313

30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.2 - Treated Water Loss :Bulk

Total Supplied	-	(Total Treated at Treated Water + Purchased Treated Water) + Ground Water Not Treated		
8	-	(6+7+7a)		
1335787		1498048	=	-162261

30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.3 - Treated Water Loss :Internal

Metered Consumption	-	Total Bulk Water Input		
10	-	8		
981957	-	1335787	=	-353830

30	30	Y	Y				Y	Y	Y	30	N	Y	50

8.3.4 - Water Balance

Bulk Input		Usage	+	Discharged	
(1+2+3+7)-4	-	[(8-11)	+	11a]	Value
1173526	-	619627	+	0	553899

30	30	Y	Y				Y	Y	Y	30	N	Y	50

Sub Topic 8.3 Compliancy & Needs Development Plans Assessment	30%	30%									30%			50%

Topic 8: Conservation & Demand Management

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Enabling Factors	Compliancy		Needs Development Plan	
	Status Quo		Future plan (to adress issues)	Strategy
OVERALL TOPIC ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT
Quality: Information Accuracy Assessment				
Quantity: Assessment of Information Completeness				
8.1 WATER RESOURCE MANAGEMENT INTERVENTIONS	0%	0%		
8.2 WATER BALANCE	###	###		
8.3 WATER LOSSES	###	###		

Comments

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	30%
Strategy	50%

OVERALL QUALITY ASSESSMENT	27%
OVERALL QUANTITY ASSESSMENT	27%

SALGA

* BASELINE INFORMATION: COMPULSARY FIELDS

Topic 9: Water Resources

* 9.1 Sources & Volumes

* Water sources	* Number of sources	* Current abstraction (Ml/Year)	* Licensed abstraction (Ml/Year)	* Community water supply		ASSESMENT	ASSESMENT
				Rural	Urban		
Groundwater	14	383000	211000	2	0	60%	50%
Surface Water	1	2200000	2000000	0	1	60%	50%
External Sources (Bulk purchase)	0	0	0	0	0	60%	50%
Water returned to source	1	0	0	0	1	60%	50%
Sub Topic 9.1 Compliancy & Needs Development Plans Assessment						1%	1%

Enabling Factors		Status Quo									Needs Development Plan											
											Future plan (to adress issues)									Strategy		
												Time Frame				Sufficient for						
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):	% or 1-5 or Nr.	Budget	Tools & Equipment	Personnel	Gazetted	Council approved	Adequate for Basic Services	Adequate for Higher Level Services	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment												1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness									%	%	Yes/No/N.A.								%	Yes/No		%
9.2 Monitoring	**Is there a Monitoring Plan in Place: Yes/No**																					
9.2.1 % of water abstracted monitored: Surface water	100								80%	75%	y	y					y	y	75%	y	N	75%
9.2.2 % of water abstracted monitored: Groundwater	100								80%	75%	y	y					y	y	75%	y	N	75%
9.2.3 % of water abstracted monitored: External Sources (Bulk purchase)	0								80%	75%	y	y					y	y	75%	y	N	75%
9.2.4 Water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	3	y	y	y	y	y	y	y	80%	75%	y	y					y	y	75%	y	N	75%
9.2.5 Water quality? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	3	y	y	y	y	y	y	y	80%	75%	y	y					y	y	75%	y	N	75%
9.2.6 Borehole yields? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	3	y	y	y	y	y	y	y	80%	75%	y	y					y	y	75%	y	N	75%
9.2.7 Borehole abstraction? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	3	y	y	y	y	y	y	y	80%	75%	y	y					y	y	75%	y	N	75%
* 9.2.8 % Compliance to drinking water acceptable limits	91	y	y	y	y	y	y	y	80%	75%	y	y					y	y	75%	y	N	75%
* 9.2.9 % Compliance to effluent release acceptable limits	90	N	N	N	N	N	N	N	80%	75%	y	y					y	y	75%	y	N	75%
9.2.10 Number of monitoring points for drinking water sufficient	Y	y	y	y	y	y	y	y	80%	75%	y	y					y	y	75%	y	N	75%
9.2.11 Number of monitoring points for effluent release sufficient	N/A	N	N	N	N	N	N	N	80%	75%	y	y					y	y	75%	y	N	75%
Sub Topic 9.2 Compliancy & Needs Development Plans Assessment									1%	1%									1%			1%

Topic 9: Water Resources

Enabling Factors			Status Quo										Needs Development Plan											
													Future plan (to adress issues)									Strategy		
														Time Frame				Sufficient for						
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):	% / 1-5 / Nr.	In Place? Y/N	Budget	Tools & Equipment	Personnel	Gazetted	Council approved	Adequate for Basic Services	Adequate for Higher Level Services	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment													1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness		Yes/No								%	%	Yes/No/N.A.								%	Yes/No		%
9.3 Water Quality	**Is there a Water Qulaity Plan in Place: Yes/No**																							
9.3.1 Reporting on quality of water taken from source: urban & rural	100%	Y	Y	Y	Y	Y	Y	Y	Y	60%	50%	Y	Y					Y	Y	30%	Y	Y	30%
9.3.2 Quality of water returned to the resource: urban	N/A	Y	Y	Y	Y	Y	Y	Y	Y	60%	50%	Y	Y					Y	Y	30%	Y	Y	30%
9.3.3 Quality of water returned to the resource: rural	N/A	Y	Y	Y	Y	Y	Y	Y	Y	60%	50%	Y	Y					Y	Y	30%	Y	Y	30%
9.3.4 Is there a Pollution contingency measures plan in place?	0%	N	N	N	N	N	N	N	N	60%	50%	N	Y					Y	Y	30%	N	N	30%
9.3.5 Quality of water taken from source: urban - % monitored by WSA self?	100%	Y	Y	Y	Y	Y	Y	Y	Y	60%	50%	Y	Y					Y	Y	30%	Y	Y	30%
9.3.6 Quality of water taken from source: rural - % monitored by WSA self?	100%	Y	Y	Y	Y	Y	Y	Y	Y	60%	50%	Y	Y					Y	Y	30%	Y	Y	30%
9.3.7 Quality of water returned to the source: urban - % monitored by WSA self?	0	N	N	N	N	N	N	N	N	60%	50%	N				N		Y	Y	30%	N	N	30%
9.3.8 Quality of water returned to the source: rural - % monitored by WSA self?	0	N	N	N	N	N	N	N	N	60%	50%	N				N		Y	Y	30%	N	N	30%
9.3.9 Are these results available in electronic format? (Yes/no)	100%	Y	Y	Y	Y	Y	Y	Y	Y	60%	50%	Y	Y					Y	Y	30%	Y	Y	30%
9.3.10 % Time (days) within SABS 241 standards per year	100%	Y	Y	Y	Y	Y	Y	Y	Y	60%	50%	Y		Y				Y	Y	30%	Y	Y	30%
Sub Topic 9.3 Compliancy & Needs Development Plans Assessment										1%	0%									0%			0%

Topic 9: Water Resources

9.5 Wet Industries

Enabling Factors | Compliancy | Needs Development Plan

Compliancy — Resources to perform the function: Billing; Budget; Tools & Equipment; Personnel; Gazetted; Council approved; Adequate for Basic Services; Adequate for Higher Level Services; ASSESSMENT; ASSESSMENT

Needs Development Plan — Future plan (to adress issues): In place?; Time Frame (Short (1) Medium (3) Long (5) None): 1 3 5 N; Sufficient for: RDP *; Higher Level *; Growth & Development *; ASSESSMENT

Strategy: In place?; Sufficient; ASSESSMENT

Quality: Information Accuracy Assessment

Quantity: Assessment of Information Completeness

Yes / No | % | % | Yes/No/N.A. | % | Yes/No | %

9.4 Wet Industries: Urban and Rural

Monthly Water use (kl) (Total)	Pressure (kPa) (Total)	Water Quality: Raw (Total)	Filtered (Total)	Chlorinated (Total)	Fully Treated (Total)	Reliability (inadequate adequate, special treatment) (Total)

0% 0% | 0% | 0%

9.5 'Raw' Water Consumers: Urban and Rural

Monthly Water use (kl) (Total)	Pressure (kPa) (Total)	Water Quality: Raw (Total)	Filtered (Total)	Other (Total)	Tariff (R/kl) Total)	Reliability (inadequate adequate, special treatment) (Total)

0% 0% | 0% | 0%

9.6 Industrial Consumer Units for Sanitation: Urban and Rural

Number of service units (Total)	Monthly waste water (kl) (Total)	Monthly Sewage (kl) (Total)	Washing leaches through storm water system (kl) (Total)	Total Treated effluent (kl) (Total)	Total Untreated effluent (kl) (Total)	Total Return flow to river system (kl)

0% 0% | 0% | 0%

9.7 Industries and their permitted effluent releases

Permitted volume (Ml/yr) (Total)	Permitted effluent quality (units) (Total)

0% 0% | 0% | 0%

Topic 9: Water Resources

9

Enabling Factors	Compliancy		Needs Development Plan		
	Resources to perform the function		Future plan (to adress issues)		Strategy
OVERALL TOPIC ASSESSMENT	ASSESSMENT	ASSESSMENT		ASSESSMENT	ASSESSMENT
Quality: Information Accuracy Assessment					
Quantity: Assessment of Information Completeness					
9.1 Sources & Volumes	1%	1%			
9.2 Monotoring	1%	1%			
9.3 Water Quality	1%	0%			
9.4 Wet Industries: Urban & Rural	0%	0%			
9.5 'Raw' Water Consumers: Urban & Rural	0%	0%			
9.6 Industrial Consumer Units for Sanitation: Urban & Rural	0%	0%			
9.7 Industries and their permitted effluent releases	0%	0%			

Comments

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	0%
Strategy	0%
OVERALL QUANTITY ASSESSMENT	0%
OVERALL QUALITY ASSESSMENT	0%

Topic 10: Financial Profile

10.1 Capital Funds

10.1.1 Income		Housing	Trading Services							Grand Total
			Enviromental Protection	Waste Management (solid waste)	Waste water management	Road transport	Water	Electricity	Other Trading Services	
		R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
10.1.1.1	Subsidies From:	0	0	0	0	0	0	0	0	0
10.1.1.2	National Government	0	0	0	0	0	0	0	0	0
10.1.1.3	Provincial Government	0	0	0	0	0	0	0	0	0
10.1.1.4	Local Government	0	0	0	0	0	0	0	0	0
10.1.1.5	Other	0	0	0	0	0	0	0	0	0
	See Attached pages									
10.1.1.6	Grants (including the equitable share) from:									
10.1.1.7	National Government									
10.1.1.8	Provincial Government									
10.1.1.9	Local Government									
10.1.1.10	Other									
10.1.1.11	Spent conditional grants									
10.1.1.12	Metering & Billing Income									
10.1.1.13	Other Income									
10.1.1.14	Deficit									
	Total Income									

Comments

Topic 10: Financial Profile

Enabling Factors	Status Quo						Needs Development Plan											
							Future plan (to adress issues)									Strategy		
	Water		Sanitation		ASSESSMENT	ASSESSMENT	In place?	Time Frame: Short (1) Medium (3) Long (5) None				Sufficient for: RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment	Urban	Rural	Urban	Rural				1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness					%	%	Yes/No/N.A.								%	Yes/No		%
*** 10.1.2 Capital Expenditure**	**% Alocation spend in last financial year**																	
	Values to be given in R million																	
Internal infrastructure	N	N	3.3	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Connector infrastructure	N	N	N	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Bulk infrastructure: New	N	N	N	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Bulk infrastructure: Upgrading	N	N	N	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Bulk infrastructure: Rehabilitation	N	N	N	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
VIP toilets & other dry sanitation system			N	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Other	N	N	N	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Average debtor days 120 plus					60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Total cost					60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Sub Topic 10.1 Compliancy & Needs Development Plans Assessment					1%	0%									0%			0%
10.2 Operating Costs	**Is there a Operating Costs Plan in Place for**							**Yes/No**										
Purchase of bulk water	N	N			60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Production costs (raw water if from own sources)	N	N			60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Production costs (treatment system)	y	y	y	y	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Operating costs (including overheads, salaries and wages, maintenance and depreciation)	y	y	y	y	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Finance charges	y	y	y	y	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Other	N	N	N	N	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Total cost					60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Sub Topic 10.2 Compliancy & Needs Development Plans Assessment					1%	0%									0%			0%

Topic 10: Financial Profile

Enabling Factors	Status Quo												Needs Development Plan											
													Future plan (to adress issues)									Strategy		
	Fixed Tariff		Volume Charges											Time Frame			Sufficient for							
			Block Definition 1 Kl per month from: 0_to_6		Block Definition 2 Kl per month from: 7_to_12		Block Definition 3 Kl per month from: 13_to_50		Block Definition 4 Kl per month from: 50_to_meer		ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None			RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment	Current	Previous	Current	Previous	Current	Previous	Current	Previous	Current	Previous				1	3	5 N	*	*	*				
Quantity: Assessment of Information Completeness	Yes/No										%	%	Yes/No/N.A.							%	Yes/No		%
10.3 Tariff & Charges	**Is there a Tariff & Charges Plan in Place for: Yes/No**																							
10.3.1 Water	**Values to be given in R / kl for Current and Previous Financial Years**																							
Residential: Communal Water Supply	16-57	N/A	16-57	N/A	16-57	N/A	16-57	N/A	16-57	N/A	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Controlled Volume Supply	2-75	N/A	2-93	N/A	3-32	N/A	3-69	N/A	4-61	N/A	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Uncontrolled Volume Supply	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Industrial	0	N/A		N/A		N/A		N/A		N/A	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Commercial		N/A		N/A		N/A		N/A		N/A	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Other		N/A		N/A		N/A		N/A		N/A	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
10.3.2 Sanitation	**Values to be given in R / kl for Current and Previous Financial Years**																							
Residential: On site dry	22-80	N/A									60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
On site wet (conservancy tanks etc.)	81-77	N/A									60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Water borne reticulated sanitation	121-45	N/A									60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Industrial	0	N/A									60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Commercial	167-75	N/A									60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Other	0	N/A									60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
10.3.3 Other	**Values to be given in R / kl for Current and Previous Financial Years**																							
Water											60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Sanitation			NONE								60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
											60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Sub Topic 10.3 Compliancy & Needs Development Plans Assessment											1%	0%								0%				0%
10.4 Free Basic Services	**Is there a Free Basic Services Policy in Place: Yes/No**																							
10.4.1 Subsidy Targeting Approach	**% of HH Targeted: Water**		**% of HH Targeted: Sanitation**																					
Rising block tariff			100							100	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Service level targeting			100							100	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
* Credits to Water account			54							54	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
* Credits to Sanitation account			54							54	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
* Number of units requiring free basic services (Water)			54							54	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
* Number of units requiring free basic services (Sanitation)			54							54	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Number of units with access to free basic services			100							100	60%	30%	Y	Y					Y	Y	30%	Y	Y	30%
Sub Topic 10.4 Compliancy & Needs Development Plans Assessment											1%	0%								0%				0%

* BASELINE INFORMATION: COMPULSARY FIELDS

See Attached pages (Fixed tariffs)

Topic 10: Financial Profile

10

Enabling Factors	Status Quo							Needs Development Plan												
								Future plan (to adress issues)										Strategy		
									Time Frame				Sufficient for							
WATER	Urban		Rural		TOTAL	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):									1	3	5	N	*	*	*				
Quality: Information Accuracy Assessment	Current	Previous	Current	Previous																
Quantity: Assessment of Information Completeness						%	%	Yes/No/N.A.								%	Yes/No		%
10.5 Metering, Billing & Income																				
*** 10.5.1 Commercial: Water**																				
* Units Supplied	186	175	N/A	N/A		60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* Metered %	100	100	0	0		60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* Billed %	100	100	0	0		60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* Not Metered	0	0	0	0		60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* Income Received %	92	90	N/A	N/A		60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* Non Payment %	8	10	N/A	N/A		60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
10.5.2 Industrial: Water																				
Units Supplied																				
Metered %																				
Billed %																				
Not Metered																				
Income Received %																				
Non Payment %																				

NONE

Topic 10: Financial Profile

Enabling Factors	Status Quo							Needs Development Plan												
								Future plan (to adress issues)										Strategy		
									Time Frame				Sufficient for							
SANITATION	Urban		Rural		TOTAL	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):																			
Quality: Information Accuracy Assessment	Fixed Charge	Value Charge	Fixed Charge	Value Charge															
Quantity: Assessment of Information Completeness									1	3	5	N	*	*	*				
						%	%	Yes/No/N.A.								%	Yes/No		%
*** 10.5.3 Commercial: Sanitation**																			
* Units Supplied	186	175	N/A	N/A		60%	50%	Y	Y				Y	Y	Y	30%	Y	Y	30%
* Metered %																			
* Billed %	100	100	0	0		60%	50%	Y	Y				Y	Y	Y	30%	Y	Y	30%
* Not Metered	0	0	0	0		60%	50%	Y	Y				Y	Y	Y	30%	Y	Y	30%
* Income Received %	92	90	N/A	N/A		60%	50%	Y	Y				Y	Y	Y	30%	Y	Y	30%
* Non Payment %	8	10	N/A	N/A		60%	50%	Y	Y				Y	Y	Y	30%	Y	Y	30%
						60%	50%	Y	Y				Y	Y	Y	30%	Y	Y	30%
10.5.4 Industrial: Sanitation																			
Units Supplied																			
Metered %																			
Billed %																			
Not Metered																			
Income Received %																			
Non Payment %																			
Sub Topic 10.5 Compliancy & Needs Development Plans Assessment						0%	0%									0%			0%

NONE

Topic 10: Financial Profile

10

Enabling Factors	Status Quo		Needs Development Plan: Future plan (to adress issues)		Needs Development Plan: Strategy	
OVERALL TOPIC ASSESSMENT	ASSESSMENT	ASSESSMENT		ASSESSMENT		ASSESSMENT
Quality: Information Accuracy Assessment						
Quantity: Assessment of Information Completeness						
10.1 INCOME	1%	0%				
10.2 CAPITAL FUNDS	1%	0%				
10.3 TARIFF & CHARGES	1%	0%				
10.4 FREE BASIC SERVICES	1%	0%				
10.5 METERING, BILLING, INCOME & SALES	0%	0%				

Comments

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	0%
Strategy	0%
OVERALL QUALITY ASSESSMENT	1%
OVERALL QUANTITY ASSESSMENT	0%

12

Topic 12: Social & Customer Service Requirements

Enabling Factors	Status Quo								Needs Development Plan											
									Future plan (to adress issues)								Strategy			
Population values to be given for Current and Previous Financial Years	Budget	Physical Resources	Personnel	Gazetted	Urban Households		Rural Households		ASSESSMENT	ASSESSMENT	In place?	Time Frame				Sufficient for			ASSESSMENT	In place?	Sufficient	ASSESSMENT
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):												Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development				
Quality: Information Accuracy Assessment																						
Quantity: Assessment of Information Completeness					Current	Previous	Current	Previous				1	3	5	N	*	*	*				
	Yes/No				Number Of				%	%	Yes/No/N.A.								%	Yes/No		%
Customer Services																						
12.1 Resources																						
12.1.1 Quality of service for water: urban	Y	Y	Y	Y					60%	50%	Y	Y					Y	Y	10%	Y	N	10%
12.1.2 Quality of service for water: rural	Y	Y	Y	Y					60%	50%	Y	Y					Y	Y	10%	Y	N	10%
12.1.3 Attending to complaints for water: urban	Y	Y	Y	Y					60%	50%	Y	Y					Y	Y	10%	Y	N	10%
12.1.4 Attending to complaints for water: rural	Y	Y	Y	Y					60%	50%	Y	Y					Y	Y	10%	Y	N	10%
12.1.5 Attending to complaints for sanitation: urban	Y	Y	Y	Y					60%	50%	Y	Y					Y	Y	10%	Y	N	10%
12.1.6 Attending to complaints for sanitation: rural	Y	Y	Y	Y					60%	50%	Y	Y					Y	Y	10%	Y	N	10%
12.1.7 Education for basic water services	N	N	N	N					60%	10%	Y	Y					Y	Y	10%	Y	N	10%
12.1.8 Pollution awareness	N	N	N	N					60%	10%	Y	Y					Y	Y	10%	Y	N	10%
Sub Topic 12.1 Compliancy & Needs Development Plans Assessment									1%	0%									0%			0%
12.2 Quality of Service for Water																						
12.2.1 Total number of consumers					3587	3565	N/A	N/A	60%	30%	Y	Y					Y	Y	10%	Y	Y	10%
* 12.2.2 Number of consumers experiencing greater than 7 days interruption in supply per year					N	N	N	N	60%	10%	Y	Y					Y	Y	10%	Y	Y	10%
12.2.3 Number of consumers receiving flow rate of less than 10 litres per minute					N	N	N	N	60%	10%	Y	Y					Y	Y	10%	Y	Y	10%
12.2.4 Water quality: no chlorination					N	N	N	N	60%	10%	Y	Y					Y	Y	10%	Y	Y	10%
12.2.5 Water quality: chlorinated					Y	Y	Y	Y	60%	10%	Y	Y					Y	Y	10%	Y	Y	10%
12.2.6 Water quality: full treatment					Y	Y	N	N	60%	30%	Y	Y					Y	Y	10%	Y	Y	10%
Sub Topic 12.2 Compliancy & Needs Development Plans Assessment									1%	0%									0%			0%
12.3 No. Consumer units to be targeted by:																						
12.3.1 Water education (including water conservation)	N	N	N	N	3587	N	N	N	60%	10%	Y	Y					Y	Y		Y	N	
12.3.2 Sanitation promotion and health and hygiene awareness	N	N	N	N	3587	N	N	N	60%	10%	Y	Y					Y	Y		Y	N	
Sub Topic 12.3 Compliancy & Needs Development Plans Assessment									1%	0%									0%			0%

SALGA

* BASELINE INFORMATION: COMPULSARY FIELDS

11

Topic 11: Water Services Institutional Arrangements Profile

Enabling Factors	Status Quo									Needs Development Plan											
WSA functions and outputs										Future plan (to adress issues)									Strategy		
											Time Frame				Sufficient for						
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):	Budget	Tools & Equipment	Personnel	Gazetted	Council approved	Adequate for Basic Services	Adequate for Higher Level Services	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment											1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness	Yes/No							%	%	Yes/No/N.A.								%	Yes/No		%
11.1 General Functions																					
*** 11.1.1 Policy development**																					
* Indigent Policy	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
* Free basic water policy (including equitable share)	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
* Free basic sanitation policy	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
* Procurement policy	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
* Credit control & debt collection policy	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
*** 11.1.2 Regulation and tariffs**																					
* Water Services bylaws with conditions as required by the Water Services Act	y	y	y	y	y	P	P	60%	30%	y	y					y	y	30%	y	y	30%
* Mechanisms to ensure compliance with bylaws	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
* Tariff structure	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
* Tariffs promulgated	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
11.1.3 Infrastructure development (projects)																					
Mechanisms to undertake project feasibility studies	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
Criteria for prioritising projects	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
Mechanisms to assess and approve project business plans	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
Mechanisms for selecting, contracting, managing and monitoring implementing agents	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
Mechanisms to monitor project implementation	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
11.1.4 Water conservation and demand management																					
Water conservation and demand management strategy	N	N	N	N	N	N	N	60%	30%	y	y					y	y	30%	y	y	30%
11.1.5 Performance management and monitoring																					
Performance management systems	N	N	N	N	N	N	N	60%	30%	y	y					y	y	30%	y	y	30%
Water service monitoring and evaluation (M&E) system	N	N	N	N	N	N	N	60%	30%	y	y					y	y	30%	y	y	30%
11.1.6 WSDP																					
WSDP information system	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
Mechanisms to monitor and report on WSDP implementation	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
Mechanisms for stakeholder participation	y	y	y	y	y	y	y	60%	30%	y	y					y	y	30%	y	y	30%
Sub Topic 11.1 Compliancy & Needs Development Plans Assessment								1%	0%									0%			0%

Topic 11: Water Services Institutional Arrangements Profile

11

Enabling Factors									Needs Development Plan											
WSA functions and outputs	Status Quo								Future plan (to adress issues)									Strategy		
										Time Frame				Sufficient for						
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):	Budget	Tools & Equipment	Personnel	Gazetted	Council approved	Adequate for Basic Services	Adequate for Higher Level Services	ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment											1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness	Yes/No							%	%	Yes/No/N.A.								%	Yes/No		%
11.2 Bulk & Retail Functions																					
11.2.1 Water Service providers (retail water)	Y	Y	Y	Y	Y	Y	Y	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
11.2.2 Water service providers (sanitation)	Y	Y	Y	Y	Y	Y	Y	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
11.2.3 Water service providers (bulk water)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
11.2.4 Water service providers (bulk sanitation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
11.2.5 Support service agents (water)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
11.2.6 Sanitation Promotion agent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
11.2.7 Support service contracts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* 11.2.8 Water service institutions	N	N	N	N	N	N	N	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* 11.2.9 WSP staffing levels: water	Y	Y	Y	Y	Y	Y	Y	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
* 11.2.10 WSP staffing levels: sanitation	Y	Y	Y	Y	Y	Y	Y	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
11.2.11 WSP training programme	N	N	N	N	N	N	N	60%	75%	Y	Y					Y	Y	30%	Y	Y	30%
Sub Topic 11.2 Compliancy & Needs Development Plans Assessment								1%	1%									0%			0%

* 11.3 Water Services Providers	* Name	* Contract type	* % Consumers served by the WSP
* 11.3.1 Retail water	N/A	N/A	N/A
* 11.3.2 Sanitation	N/A	N/A	N/A

Sub Topic 11.3 Compliancy & Needs Development Plans Assessment	0%	0%	0%	0%

11.1 GENERAL FUNCTIONS	1%	0%
11.2 BULK & RETAIL FUNCTIONS	1%	1%
11.3 WATER SERVICES PROVIDERS	0%	0%

NEEDS DEVELOPMENT PLAN ASSESSMENT	
Future plan	0%
Strategy	0%
OVERALL QUALITY ASSESSMENT	0%
OVERALL QUANTITY ASSESSMENT	0%

Topic 12: Social & Customer Service Requirements

Enabling Factors	Status Quo						Needs Development Plan											
							Future plan (to adress issues)									Strategy		
								Time Frame				Sufficient for						
Resources available to perform function? (Yes: Y, No: N, Partially: P, N/A: NA):	Urban Households		Rural Households		ASSESSMENT	ASSESSMENT	In place?	Short (1) Medium (3) Long (5) None				RDP	Higher Level	Growth & Development	ASSESSMENT	In place?	Sufficient	ASSESSMENT
Quality: Information Accuracy Assessment	Current	Previous	Current	Previous				1	3	5	N	*	*	*				
Quantity: Assessment of Information Completeness	Number Of:				%	%	Yes/No/N.A.								%	Yes/No		%
12.4 Attending to Complaints for Water	**Households values to be given for Current and Previous Financial Years**																	
12.4.1 Total number of consumer units	3587				60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.4.2 Number of complaints of quality of service per year divided by total number of consumer units	N	N	N	N	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.4.3 Number of queries/complaints received within the year	960	N/A	280	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
* 12.4.4 % Queries responded to within 24 hours	85	85	85	85	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.4.5 Number of major or visible leaks reported within the year	960	N/A	280	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.4.6 % Major or visible leaks repaired within 48 hours after being reported	960	N/A	280	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
Sub Topic 12.4 Compliancy & Needs Development Plans Assessment					1%	0%									0%			0%
12.5 Attending to Complaints for Sanitation: Discharge to Treatment Works	**Households values to be given for Current and Previous Financial Years**																	
12.5.1 Total number of consumer units	3587				60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.5.2 Number of complaints of quality of service per year divided by total number of consumer units	N	N	N	N	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.5.3 Number of queries/complaints received within the year	520	N/A	0	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.5.4 % Queries responded to within 24 hours	100	100	100	100	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.5.5 Number of blockages reported within the year	520	N/A	0	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.5.6 % Blockages repaired within 48 hours after being reported	100	100	100	100	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
Sub Topic 12.5 Compliancy & Needs Development Plans Assessment					1%	0%									0%			0%
12.6 Attending to Complaints for Sanitation: Pit/Tank Pumping	**Households values to be given for Current and Previous Financial Years**																	
12.6.1 Number of pits/ tanks	72	N/A	1080	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.6.2 Number of calls received within the year for emptying	72	N/A			60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.6.3 Number of calls received within the year for emergency maintenance to pits/ tanks	0	N/A			60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.6.4 % Queries responded to within 24 hours			100	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
12.6.5 % Pits/tanks pumped within 48 hours of being reported			100	N/A	60%	30%	Y	Y					Y	Y	10%	Y	N	10%
Sub Topic 12.6 Compliancy & Needs Development Plans Assessment					1%	0%									0%			0%

OVERALL TOPIC ASSESSMENT

12.1 RESOURCES	1%	0%
12.2 QUALITY OF SERVICE FOR WATER	1%	0%
12.3 NO. CONSUMER UNITS TO BE TARGETED BY	1%	0%
12.4 ATTENDING TO COMPLAINTS FOR WATER	1%	0%
12.5 ATTENDING TO COMPLAINTS FOR SANITATION: DISCHARGE TO TREATMENT WORKS	1%	0%
12.6 ATTENDING TO COMPLAINTS FOR SANITATION: PIT/TANK PUMPING	1%	0%

NEEDS DEVELOPMENT PLAN ASSESSMENT

Future plan	0%
Strategy	0%
OVERALL QUALITY ASSESSMENT	1%
OVERALL QUANTITY ASSESSMENT	0%

* LIST OF PROJECTS

Description		Services Type	Programme type	Project type		Components	
Project number	Name			Water	Sanitation	Water	Sanitasion
		W: Water S: Sanitation	Water Services WIB: Internal Bulk WRB: Regional Bulk WT: Treatment WWT: Waste Water Treatment WR: Reticulation SS: Sanitation Service H: Housing O: Other	Infrastructure IN: New IE: Extention IU: Upgrade Iin: Incomplete IR: Replace Rosource RD: Demand Man RLS: Local Source Dev. Management MOM: O&M MR: Refurbishment Housing Internal HII: Informal HIF: Formal Rural Housing Permanent Housing: Permanent HPB: Backyard Dwel HPS: Shared Services O: Other	Infrastructure IN: New IE: Extention IU: Upgrade IB: Replace Buckets RDP" RDP Management MOM: O&M MR: Refurbishment Housing Internal HII: Informal HIF: Formal Rural Housing Permanent HPB: Backyard Dwel HPS: Shared Services O: Other	PL : Pipeline PS : Pump Station R : Reservoir TW : Treatment W GW : Groundwater RET : Reticulation	VIP LF: Low Flush WB: Waterborne STW: Treatement works
Project 922	Upgrading VIP Toilets	S	SS: Sanitation Service		New		
	Installation of sewer reticulation						
Project 926	Upgrading of existing water su	W	Water Services	Infrastructure		GW	
Bulk District	Bulk supply to Vanwyksvlei an	W	WRB	Infrastructure		PL	
Network	Bulk from Orange river to Mar	W	WRB	Infrastructure		PL	
	Bulk from orange river to Niek	W	WRB	Infrastructure		PL	

* BASELINE INFORMATION: COMPULSARY FIELDS

Topic 13: Needs Development Plan

LIST OF PROJECTS

	Project Status	Council Approved	Project Primary Class	Population Benefiting				Proposed project funding (RM)									
				Water		Sanitation		08/09				09/10				10/11	11/12 +>
	R: Recon F: Feasib. D: Design T: Tender C: Contruction	Y: Yes N: No I: In process	B - Basic H - Higher S - System Improvement	Basic	Higher	Basic	Higher	MIG	DWAF	Own/ Other	Total	MIG	DWAF	Own	Total	Total	Total
1	T	Y	H				Y									Y	
2	T	Y	I		Y		Y									Y	
3	R	Y	H		Y												→
4	R	Y	H		Y												→
5	R	Y	H		Y												→

* BASELINE INFORMATION: COMPULSARY FIELDS

WSA Name: Siyathemba **LOCAL MUNICIPALITY**

Reporting and assessment documents status

	Documents	Previous Reference date	Included in current WSDP version module 4	Current WSDP version module 4 submission date
1	IDP checklist framework version 2.4:	In process	Included (not complete)	
2	DWA Regulatory Performance Management System (RPMS)	Completed	Completed	
3	WSA Checklist April2005	Completed	Completed	
4	Blue Drop 2010 Assessment	Completed	Included (complete)	
5	Green Drop 2010 Assessment	In process	Included (not complete)	

Options
In process
Not existing
Completed
Completed & Submitted
Needs review
Completed

Options
Not included
Included (not complete)
Included (complete)

SIYATHEMBA & DMA LOCAL MUNICIPALITY

INTEGRATED ENVIRONMENTAL MANAGEMENT PROGRAM

DECEMBER 2007
Project no: A1289

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african EPA
Development through Integration

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INTEGRATED ENVIRONMENTAL MANAGEMENT PROGRAM

SIYATHEMBA & DMA LOCAL MUNICIPALITY

1. **Executive Summary**
2. **Institutional and Legal framework**
3. **Siyathemba & DMA Municipality Issues, Strategies & Opportunities**
4. **Urban Renewal Guideline Document**
5. **Civil Works - Impacts & Mitigation Measures Matrix**

- 1 -
EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

OVERVIEW

African EPA was appointed to develop an Integrated Environmental Management Program (IEMP) for the Pixley Ka Seme District Municipality (PKSDM). A copy of the entire PKSDM IEMP was provided to **Siyathemba Local Municipality** via the District Municipality's office.

This document is a summary of information applicable to the **Siyathemba Local Municipality** only. It is believed that through the implementation of the guidelines in this document, a vast improvement will be seen from an environmental perspective on a local municipal level.

KEY OPPORTUNITIES

Tourism

- Nature based tourism along the Orange River (Prieska specifically) and ridges.
- Route based tourism along the N-routes.

Agribusiness

- Fish farming

KEY ISSUES & THREATS

Salinity of the Orange River

Water samples from the Vanderkloof, Lower Orange and Molopo areas indicate exceedances of irrigation guidelines over 35% of the time for levels of electrical conductivity (EC) and TDS. High levels of EC and TDS indicate increasing levels of salts, accumulation of salts in the soil, resulting in reduced yields of crops that are sensitive to soil salinity (DWAF, 1996b). (North Cape SOE Report 2004)

Unrehabilitated Asbestos Mines

In the Northern Cape asbestos is still perceived as an important issue because of the many unrehabilitated mine dumps that still have the potential to pollute the environment, and therefore cause asbestosis or mesothelioma. The public still has access to some of these dumps, and some individuals recover the asbestos for resale as there is apparently still a market for it (Du Plooy, pers comm., 2003). **In Prieska about 5 new cases (out of a population of about 15 000) of mesothelioma are diagnosed annually although the mines in the area have been closed since 1979 (Smith, pers comm., 2004).**

Land degradation

Land use in the Karoo currently consist of sheep farming, some ostrich farming, game farming (that is currently on the increase), as well as crops farming that include lucerne, onions, garlic etc. Mining and development activities are likely to expand in the future.

One of the major threats to biodiversity in the Karoo is the long-term overgrazing by small livestock. This vast and open, semi arid rangeland covers a large part of South Africa and is impressively adapted to its climatic extremes. Evidence of degradation in these parts of the Karoo is clearly visible, mainly as a result of environmental (low and erratic rainfall) and anthropogenic factors (poor management practices).

The degradation is characterized by large bare and denuded areas and it seems these areas will not recover by natural succession processes alone. Some sort of **active intervention has therefore inevitably become necessary in order to avoid aridification and possibly also desertification.**

(Source: Endangered Wildlife Trust, 2007)

Loss of riverine habitat

Only 5% of terrestrial ecosystems in South Africa are critically endangered, while 44% of river ecosystems are critically endangered. These river courses together with the riparian zones have an important biodiversity function as well as an economic value in the Karoo. These denser structures of vegetation are high in productivity and are

extremely important refuges for many animal species. The riparian zones are also very important to stock farmers as it provides grazing, especially during dryer seasons.

The flagship species for this habitat is the Riverine Rabbit (*Bunolagus monticularis*), which is Critically Endangered. **Today the population size is estimated to be just a view hundred animals.** At present, none of the Riverine Rabbit habitat is protected within a provincial nature reserve or national park and the species only occurs on private Karoo farmland (Ahlmann, Collins & Seal, 2000). In response to the rapidly declining populations, landowners in the Karoo have established Riverine Rabbit conservancies covering an area of approximately 350 000 ha of private farmland (*pers. comm*. Ahlmann, 2007[1]).

(Source: Endangered Wildlife Trust, 2007)

Need for Urban Renewal of Apartheid-Era Townships

National Routes (or the main route through a town) was used in the previous regime to severe the townships from the white suburbs. There is a great lack of integration still today in many of the Karoo towns. Additional to this, many areas still have bucket system toilets or French drains, which prove a risk for the ground water source of the towns. Refuse and Landfill sites close to these areas also prove a human health risk. Lack of storm water systems means the occasional rain storms causes heavy erosion and flash floods. Most of these areas also do not have trees and open space and therefore the quality of life is perceived as low.

KEY SOLUTIONS

Funding

Although some funding such as MIG is available to the municipalities and departments, it is crucial to source more funding to speed up the progress of sustainable development for human settlements in the study area. Training is also required to improve the business plans which are being put forward to large funding agencies. Identification of specific projects are crucial.

[1] Dr Vicky Ahlmann, Riverine Rabbit Working Group, PO Box 172, Loxton, 6985.

Participation & Communication

In an area with little resources and people, co-operative governance and community participation in projects are crucial. As local municipalities does not have much capacity, they are largely dependent upon the District Municipality and State Departments. These relationships must be built and strengthened.

Training & Education

Municipal and government officials can benefit enormously from training in their respective fields, and specifically regarding the environment. Environmental Awareness Training to land owners (farmers) and communities also become crucial for the sustainable management of the land.

Strategies / Initiatives / Projects

- Environmental Education of Farmers and Communities
- Compliance & Enforcement of Illegal Water Uses
- Conservation Mapping & Initiatives
- Environmentally Responsible Development
- Urban Renewal Programmes

- 2 -
INSTITUTIONAL AND LEGAL FRAMEWORK

INSTITUTIONAL AND LEGAL FRAMEWORK

In this section all legislation relevant to the environment has been listed and summarised. In the opportunities table for each municipality, the applicable legislation for each development category is indicated in the table next to each category. For further information pertaining the relevant legislation this section should be consulted. It is only a summary that will enable the user of this program to relate a development proposal to the applicable legislation. It is however important that a legal advisor be consulted if complicated issues arise which involves more than one act. It is also important to realise that legislation changes rapidly and that this section will be outdated quite soon.

This section also includes the result of an authority audit. The purpose and result of the audit was to indicate which department is responsible and accountable to apply certain legislation. For example, Department of Mineral and Energy (DME) is responsible to implement and police the Mineral and Petroleum Resources Development Act, no 28 of 2003. The user of the IEMP will be able to determine what legislation is applicable to a development category and who is the responsible department.

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA NO 108 OF 1998	Section 24: Everyone has the right to an environment that is not harmful to their health or well-being and to protect it for the benefit of present and future generations. Must take measures to prevent pollution and ecological degradation and promote conservation while promoting justifiable economic and social development
NATIONAL ENVIRONMENTAL MANAGEMENT ACT NO 107 OF 1998	Section 2: The principles set out in this section apply throughout the Republic to the actions of all organs of state that may significantly affect the environment. Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably. Section 28: Duty of care and remediation of environmental damage Section 30: Control of emergency incidents Section 31: Access to environmental information and protection of whistle-blowers Regulations have been published in April 2006 that replaces the listed activities for EIA's as listed in ECA - these new regulations have impact on all kinds of infrastructure and other development.
BIODIVERSITY ACT	Act responsible to assist in management, conservation of biological diversity as well as ensuing sustainable use and equitable sharing of benefits derived. Section 40 allows MEC to establish a bioregional plan for a given area to align conservation strategies. Section 43 allows anybody who wishes to protect and indigenous species or ecosystem to set up a Biodiversity management plan. Although plans must be approved by the Minister. Section 52 allows MEC to publish provincial list of threatened ecosystems, local development plans should then take these into consideration.

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
	Minister can publish a threatened species list. Activities involving these species can then not be carried till a permit is obtained as per Section 57. Similar ruling applies for alien species as per Section 69. Chapter 6 deals with bio-prospecting, where a permit is required to undertake such an activity.
ENVIRONMENT CONSERVATION ACT NO 73 OF 1989	This Act deals with the effective protection of the environment and more specifically waste management (section 20), discarding of waste (section 20(6) and the prohibition of littering (section 19(1)). GN 1986 (GG 12703 of 24 August 1990): Identification of matter as waste GN 51 (GG 15428 of 24 January 1994) - General environmental policy which should be applied with any anticipated new activities GN R 1182, GN R 1183 and GN R 1184 (all promulgated ito GG 18261 of 5 September 1997), stipulate EIA's to be done in terms of certain activities identified under section 21(1). GN R 1196 (GG 15832 of 8 July 1998): Application for disposal site procedure GN R 154 (GG 13717 of 10 January 1992): Noise control regulations in terms of section 25 R.625 of 9 May 2003: Regulations regarding plastic carrier bags and plastic flat bags Section 31A: Powers of Minister, competent authority, local authority or government institution where environment is damaged, endangered or detrimentally affected. Proc R 29 (GG 16346 of 7 April 1995): Assignment of this act to the Provinces.

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
ATMOSPHERIC POLLUTION PREVENTION ACT NO 45 OF 1965 (Soon to be replaced by the current Air Quality Bill)	To provide for the prevention of the pollution of the atmosphere. It deals with the control of noxious or offensive gases (Part II) and the application of registration certificates where scheduled processes are carried on (section 9). Part III deals with atmospheric pollution by smoke and includes the installation of fuel burning appliances and smoke control regulations. Part IV: Dust control GN R 1387 (GG 22941 of 21 December 2001): Revised guidelines for sulphur dioxide Part V: Air pollution by fumes emitted by vehicles GN R 1651 (GG 4393 of 20 September 1974): Emission by diesel driven vehicles
CONSERVATION OF AGRICULTURAL RESOURCES ACT NO 43 OF 1983	This act provides for the control over utilization of natural agricultural resources, to promote the conservation of soil, water resources and vegetation and the combating of weeds and invader plants. Section 2 : Except for the provisions relating to invader plants and weeds, this Act shall **not** apply to any land situated in an **urban area** or to any area declared to be a **mountain catchment area** under the Mountain Catchment Area Act, 1970. GN R 1048 (GG 9238 of 25 May 1984): Regulations dealing with weeds and invader plants.
ADVERTISING ON ROADS AND RIBBON DEVELOPMENT ACT NO 21 OF 1940	The purpose of this act is to regulate the display of advertisements outside certain urban areas at places visible from public roads and the depositing or leaving disused machinery or refuse near certain public roads.
EXPLOSIVES ACT NO 26 OF 1956	The purpose of this act is to consolidate the laws relating to the manufacture, storage,

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
	sale transport, importation, exportation and the use of explosives. GN R 1604 (GG 3648 of 8 September 1972): Spillage of explosives, disposal of explosive waste.
FENCING ACT NO 31 OF 1963	The purpose of this act is to consolidate the laws relating to fences and the fencing of farms and other holdings and matters incidental thereto. Section 10: Repair of boundary fences
FERTILIZERS, FARM FEEDS, AGRICULTURAL REMEDIES AND STOCK REMEDIES ACT NO 36 OF 1947	The purpose of this act is to provide for the appointment of a registrar of fertilizers, farm feeds, agricultural remedies and stock remedies; for the registration of fertilizers, farm feeds, agricultural remedies, stock remedies, sterilizing plants and pest control operators; to regulate or prohibit the importation, sale, acquisition, disposal or use of fertilizers, farm feeds, agricultural remedies and stock remedies. Section 3 and 7(2)(a)(ii): Registration of fertilizers, farm feeds, agricultural remedies, stock remedies, sterilizing plants and pest control operators. Section 7: Sale of fertilizers, farm feeds, agricultural remedies and stock remedies.
FIRE BRIGADE SERVICES ACT NO 99 OF 1987	This act provides for the establishment, maintenance, employment, co-ordination and standardization of fire brigade services.
FOREST ACT NO 122 OF 1984	Most of the provisions of this act have been repealed by the National Forests Act, but the regulations relating to timber and protected trees remain. GN 1339 (GG 5242 of 6 August 1976): Protected trees
HAZARDOUS SUBSTANCES ACT NO 15 OF 1973	In general this act provides for the control of substances which may cause injury or ill- health to or death of human beings; it divides such substances or products into groups

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
	in relation to the degree of danger. It also prohibits the dumping or disposal of such substances and products.
HEALTH ACT NO 63 OF 1977	In general this act provides for measures to promote the health of inhabitants of the Republic and the rendering of health services. It also deals with nuisance which means anything which is offensive, injurious or dangerous to health and would include any stream, pool, marsh, urinal, drain, the accumulation of refuse, any industrial premises not kept in a cleanly state and free from offensive smells (section 1).
AGRICULTURAL PESTS ACT NO 36 OF 1983	To provide for measures by which agricultural pests may be prevented and combated; and for matters connected therewith.
MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT NO 28 OF 2003 (In force since 1 May 2004)	This Act makes provision for equitable access to and sustainable development of the nation's mineral and petroleum resources. This act together with the Mine Health and Safety act no 29 of 1996 and the regulations promulgated in terms of the Mines and Works act no 27 of 1956 apply only to mining areas.
NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS ACT NO 103 OF 1977	To provide for the promotion of uniformity in law relating to the erection of buildings in the areas of jurisdiction of local authorities and for the prescribing of building standards Any building, excluding a dwelling house, in which refuse is or will be generated shall be provided with an adequate storage area for refuse containers (Regulation U1) The location of any area contemplated in regulation u1 shall be such that access thereto from any street for the purposes of removing any refuse is to the satisfaction of the local authority (Regulation U2).

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
NATIONAL FORESTS ACT NO 84 OF 1998	To reform the law on forests and in general to promote the sustainable management and development of forests for the benefit of all. It also includes measures for the protection of trees and emergency procedures therefore.
NATIONAL HERITAGE RESOURCES ACT NO 25 of 1999	In general this act provides for an integrated and interactive system for the management of the national heritage resources and to empower civil society to nurture and conserve their heritage resources for future generations. It includes burial sites and graves and archeological sites, national monuments, etc.
NATIONAL ROAD TRAFFIC ACT NO 93 OF 1996	Deals with road traffic matters, but as far as environmental matters are concerned, it deals with the transportation of certain dangerous goods. Regulations have been issued to this effect (GN R 225 (GG 20963 of 17 March 2000).
NATIONAL VELD AND FIRE FOREST ACT NO 101 OF 1998	Section 1 : The purpose of this Act is to prevent and combat veld, forest and mountain fires throughout the Republic and in this regard the Act provides for a variety of institutions, methods and practices for achieving the purpose. This includes the formation of fire protection associations (section3) and the duty to prepare and maintain fire breaks (section 12).
GAME THEFT ACT NO 105 OF 1991	To regulate the ownership of game in certain instances; to combat the theft and wrongful and unlawful hunting, catching and taking into possession of game; and to provide for matters connected therewith.
NATIONAL WATER ACT NO 36 OF 1998	The purpose of this act is to protect water resources and the allocation of water. It deals with the protection of water resources (Chapter 3) and the prevention and the remedying of the effects of pollution (section 19) and the control of emergency incidents (section 20). Regulations have been promulgated on the use of water for mining and related activities aimed at the protection of water resources and includes the separation of clean and dirty

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
	water systems.
WATER SERVICES ACT NO 108 OF 1997	The general purpose of this act is the provision for access to basic water supply and sanitation frameworks for water service institutions and water service providers and the monitoring of water service providers. It includes industrial use of water and the discharge of industrial effluent (section 7).
WATER ACT NO 54 OF 1956	This Act has been repealed but the regulations promulgated in terms thereof still remain in force. These include: GN R 2834 (GG 10048 of 27 December 1985): Regulations for the erection, enlargement, operation and registration of water care works GN R 991 (GG 9225 of 18 May 1984): Requirements for the purification of waste water or effluent GN R 3208 of 29 August 1969: Regional standards for industrial effluent GN R 1560 (GG 10366 of 25 July 1986): Dams with a safety risk
NUCLEAR ENERGY ACT NO 46 OF 1999	To regulate aspects of nuclear fuel and related matters.
OCCUPATIONAL HEALTH AND SAFETY ACT NO 85 OF 1993	In general this act provides for the health and safety of persons at work. However, many regulations have been promulgated in terms of this act which are of an environmental nature. GN R 1179 (GG16596 of 25 August 1995): Hazardous chemical substances GN R 155 (GG 23108 of 10 February 2002): Asbestos regulations GN R 236 (GG 23175 of 28 February 2002): Lead regulations

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
PHYSICAL PLANNING ACT NO 125 OF 1991	Relates to zoning, spatial and guide plans.
LOCAL GOVERNMENT TRANSITION ACT NO 209 OF 1993	Deals with Integrated Development Plans.
DEVELOPMENT FACILITATION ACT NO 67 OF 1995	Policy framework for land development, the so-called Local Development Objectives.
PROMOTION OF ACCESS TO INFORMATION ACT NO 2 OF 2000	This act gives effect to the constitutional right of access to any information held by the state and any information that is held by another person and that is required for the exercise or protection of any rights as provided for in section 32 of the Constitution. Any person whose environmental rights (as per section 24 of the Constitution) have been infringed, may request relevant information held by the state or private bodies.
PROMOTION OF ADMINISTRATIVE JUSTICE ACT NO 3 OF 2000	This act gives effect to the right to administrative action that is lawful, reasonable and procedurally fair and to the right to written reasons for administrative action as contemplated in section 33 of the Constitution.
PROTECTED DISCLOSURES ACT NO 26 OF 2000	This act makes provision for procedures in terms of which employees may disclose information regarding unlawful or irregular conduct by their employers or other employees and it provides for the protection of employees who make a disclosure which is protected in terms of this act.
THE SOUTH AFRICAN NATIONAL ROADS AGENCY LIMITED AND NATIONAL ROADS ACT NO 7 OF 1998	This act provides for a national roads agency for the Republic to manage and control the Republic's national roads system and take charge of matters like development and maintenance within the framework of government policy. It also prohibits any person from depositing or leaving a disused vehicle or machine or a disused part of a vehicle or machine, or any rubbish or other refuse on a national road (section 51).
NORTHERN CAPE PLANNING AND DEVELOPMENT ACT NO 7 OF 1998	This will be applicable to any planning and land development related activities and serves to guide the administration of any spatial plans, policies, etc.

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
CAPE NATURE AND ENVIRONMENTAL CONSERVATION ORDINANCE NO 19 OF 1974	To consolidate and amend the laws relating to nature and environmental conservation. It includes provisions relating to the hunting or possession of endangered wild animals, the hunting of protected wild animals. It regulates the prohibition of killing or capturing of protected wild animals in excess of daily bag limit, the prohibition of the manipulation of boundary fences, laying of poison, possession of endangered flora and the picking of certain flora.
PN 955 OF 29 AUGUST 1975	These regulation were issued ito the aforesaid Ordinance and apply to, *inter alia*: • Wild animals • Fish in inland waters • Professional hunters, etc
PROC 1 OF 23 JANUARY 2002	This regulation was issued ito the same ordinance above. In this regulation the MEC determines that in the areas listed in Schedule 1 and in respect of the species of protected wild animals mentioned in the first and second columns, respectively, of Schedule 2, the hunting seasons and the daily bag limits as set out in the third and fourth columns, respectively, of the said Schedule 2.
CAPE ROADS ORDINANCE NO 19 OF 1976	The general purpose of this ordinance is to consolidate and amend the law relating to public roads and public paths. Any person who damages, destroys or defaces any public road or public path or places any obstruction or obstacle on, in over or under a public road, etc. will be guilty of an offence and upon conviction liable to a fine.
AN 575 OF 29 SEPTEMBER 1950	These are standard drainage regulations which were issued in terms of section 201 of Ordinance 10 of 1912 and they mainly deal with drainage systems, alterations thereto,

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
	the local authority's approval, inspection, maintenance, etc
CAPE LAND USE PLANNING ORDINANCE NO 15 OF 1985	This ordinance will be applied if there is any change in land use. It stipulates that structure plans be prepared.
PN 1050 OF 5 DECEMBER 1988	This piece of legislation was promulgated in terms of the Land Use Ordinance No 15 of 1985 and sets out the administrative procedure regarding departure, zoning and subdivision.
PN 527 OF 25 JULY 1952	Cape standard sanitary regulation promulgated in terms of Ordinance no 19 of 1951. It deals with septic tanks, closets and urinals and domestic refuse.
PN 504 OF 19 JUNE 1953	Cape Local Authorities Standard Water regulations
PN 416 OF 14 MAY 1954	Regulations relating to inflammable liquids and substances.
PN 504 of 12 AUGUST 1983	Drainage by-law
OTHER DOCUMENTS OF IMPORTANCE	Minimum requirements for classification, handling and disposal of hazardous waste, second edition, 1998 (issued by DWAF) Vienna Convention for the protection of the ozone layer Convention on Biological Diversity King report on corporate governance for South Africa, 2002 Montreal Protocol on Substances that deplete the ozone layer, 1987 Northern Cape Environmental Implementation Plan (GN 40 of 2003) World Heritage Convention Act no 49 OF 1999 (provides for the incorporation of the World Heritage Convention into South African law; the enforcement and implementation

RELEVANT LEGISLATION	OBJECTIVES / PRINCIPLES
	of the World Heritage Convention in South Africa; the recognition and establishment of World Heritage Sites, etc)

LEGAL OBLIGATIONS AS PER DTEC

	International Obligations - Protocol & Conventions
1	Lusaka Agreement on Co-operative Operations Directed at Illegal Trade in Wild Fauna & Flora (1974)
2	Convention on International Trade in Endangered Species of Fauna and Flora – CITES (1975)
3	Convention on Wetlands of International Importance (RAMSAR) (1975)
4	Convention on the Conservation of Migratory Species of Wild Animals (Bonn) (1991)
5	Convention on Biological Diversity (CBD) (1995)

	National Obligations - Biodiversity Legislation
1	National Environmental Management Act 107 of 1998 (NEMA)
2	National Environmental Management Biodiversity Act 10 of 2004 (NEMBA)
3	National Environmental Management Protected Areas Act 57 of 2003 (NEMPA)
4	National Environmental Management Protected Areas Amendment Act 31 of 2004 (NEMPAA)
5	Environment Conservation Act 73 of 1989 (ECA)
6	Game Theft Act 105 of 1991 (GTA)

	National Obligations - Policies / Procedures & Guidelines
6	National Policy and Strategy for Problem Animal Control in South Africa
7	Red billed kwela
8	Cycad Policy
9	Locust control in South Africa
10	Opportunity Species
11	Ban on the importation of primates
12	Hunting of Leopard
13	Exotic parrots
14	Breeding in captivity of domesticated Guinea-fowl
15	Exotic Birds species
16	Exotic Fish species
17	National Policy and Strategy for Problem Animal Control in South Africa

	Provincial Ordinances
1	Nature and Environmental Conservation Ordinance 17 of 1974
2	Nature and Environmental Conservation Regulations - Provincial Notice PN 955 / 1975
3	Problem Animal Control Ordinance 26 of 1957

	Provincial Policies / Procedures & Guidelines
18	A Freshwater Gill Net Fisheries Policy for the Northern Cape
19	Large Predator Policy
20	Keeping Blue Cranes in Captivity
21	Hunting of leopard Policy
22	Afrika Olifant – Merk van Ivoor
23	Inspection Services Policy
24	Guidelines for Bird Ringing Permits
25	Guidelines for Zoological Research Permits
26	Guidelines for Flora Research Permits
27	Falconry Policy
28	Birds of Prey Policy
29	Law Administration Policy
30	Policy on the trade and captivity of avifauna
31	Professional Hunting Policy
32	Wildlife Facilities Policy
33	Hippo policy

	Provincial Policies / Procedures & Guidelines
34	Adequate Enclosure Policy
35	Conservancy Policy
36	Hunt of Opportunity Species
37	Primate Policy
38	Policy for the establishment of Private Nature Reserves
39	Reptile Policy
40	Small Carnivore Policy
41	Translocation of game Policy
42	Transportation of game policy
43	Game exchange scheme policy
44	Policy on wildlife pet trade

- 3 -
LOCAL MUNICIPALITY ISSUES, STRATEGIES AND OPPORTUNITIES

ENVIRONMENTAL SUMMARY - SIYATHEMBA MUNICIPALITY

1. PRIORITY ENVIRONMENTAL ISSUES & STRATEGIES

A – ISSUES IDENTIFIED FROM INTEGRATED DEVELOPMENT PLAN		
Specific Environmental Issues	**Environmental Consequences**	**Strategies and legislation to address Issues for the Municipality**
1. Unrehabilitated Asbestos Mines nort-west of Prieska. *2. Lack of Tourism to Prieska (not on Main Route).* *3.* Salinity of the Orange River *4.* Incinerator not working **Input from Intergrated Waste Management Plan for PKSDM (Kwezi V3):** 1. 3 Landifll sites – Niekerkshoop, Prieska, Marydale 2. No authorizations for Niekerkshoop & Marydale 3. Upgrades and operation improvements required for all sites in terms of DWAF Minimum Requirements. 4. Not sufficient equipment for effective refuse removal service 5. No recycling 6. Illegal Dumping	Human Health None River Ecosystem Human health Surface & Ground Water	Rehabilitate with DME & Land Owners Tourism Initiatives such as Die Bos DWAF Monitoring & Compliance Infrastructure Development See IWMP

Summary of District Municipal Area

This is a rural area with no urban areas within its boundaries. The main economical activities in this area are agricultural of nature. There is also mining activities in this area but on a much smaller scale then agricultural activities. The DMA consist of three separate sections with a estimated total surface of 47 308ha. Only one worth-mentioning river flows through this area, namely the Orange River. Smaller non-permanent rivers like the Brakriver also appears here, but it does not really influence the economic activities of the DMA. There are scarcely mountains in this area but many hills. Mountain-ranges that can be recalled is the is the Asbesmountain and the Doringmountain The climate of this area is mainly semi-desert with excessive temperature. Rainfall is low and normally during summer. Apart from the Orange River the inhabitants mostly in the Marydale and Niekershoop areas are making use of underground water to provide for their own needs and these of their livestock.

2. KEY PERFORMANCE (SUSTAINABILITY) INDICATORS FOR THE ENVIRONMENT

FROM IDP

The vision of the Environmental Management Plan is as follows:
To manage the development of natural resources in such a way that there will be no negative influence on nature and the environment.

Mission
The mission of the Siyathemba Municipality focuses broadly on service delivery, utilisation of resources, economical development and job creation, a safe and healthy community as well as a friendly environment.

With the above-mentioned in mind the mission of the Environmental Management Plan are as follows:
- To deal with the disposal of waste in an acceptable way.
- To manage and rehabilitate the sites where disposal will take place, effectively.
- To control the exploitation of asbestos and other mining activities.
- To ensure the regulation of all land-uses in the MA
- To establish an effective monitoring- and record keeping programme.
- To secure and utilise the personnel of the Council the optimum
- To protect our on-surface water- and water supply; and
- To find a harmonious balance between economical development and -utilisation of the environment on the one side and the preservation and rehabilitation of the environment on the other side.

To promote sustainable environment in the region. The following environment programmes will be implemented in accordance with the framework of the IDP and relevant planning legislation:

a. To return, strengthen or add to features, structures and design elements which enhance beauty, attractiveness and overall amenity in the environment of the region.
b. Assist local municipalities in ensuring that relative proportions of physical development (e.g. buildings) are kept with desirable human scale.
c. In all areas in towns, we shall also assist municipalities in encouraging high standards of cleanliness and ensure regular and efficient cleaning up and removal of refuse.
d. Encourage in accordance with the MSA of 2000 and with all relevant enactments, on the creation, retention and proper maintenance of sites and structures of outstanding beauty and historic interest.
e. In keeping with the need to preserve buildings and other features of historic significance as mentioned earlier in this report, the municipality together with local municipalities take all measures possible to ensure proper conservation and nurturing of any natural or man-made features/ structures within the district in terms of relevant legislation. In particular, we shall put into effect measures for conservation of building of architectural significance as laid down in the historic buildings regulation.

f. Compile a register/ list of historic buildings/ sites which require to be conserved.

ALSO REFER TO GENERIC SUSTAINABILITY INDICATORS TABLE

3. SPECIFIC OPPORTUNITIES

- Die Bos Resort Upgrading.
- Orange River as Tourism Resource
- Fish Farming
- Nature Based Tourism Potential on Ridges and Orange River in DMA

TOURISM OPPORTUNITIES

Tourism	Crafts	Cultural	Nature reserve	Recreation Activities / 4 x 4	Birding	Lodges/ Game farming / Hunting	Heritage / Architecture	War	Other
Prieska	Tiger's eye fort Arts and Crafts Prieska Museum	Prieska Museum	Die bos Nature Reserve Hiking Trails Safari Ria Hysaman Aloe Garden Wonderdraai	Alongside the orange River at Die bos Nature Reserve	Die bos Nature Reserve Hiking trail Ria Hysaman Aloe Garden Wonderdraai	Die bos Nature Reserve Blaauwbosch Plaaswerf Herberg Preiskaspoort Hunting Farm Who can tell Ondraaivlei Nelspoortjie Karoo Guest House Wonderdraai Guest Farm.		Memorial Garden Fort on top of Prieska Koppie.	Ria Huisman Aloe Garden Die bos Nature reserve Wonderdraai land.
Niekerkshoop									
Marydale			Boegoeberg Dam Kokerboom forest		Boegoeberg Dam Kokerboom forest	Trans Boegoe Eco Resort			Quiver tree forest Rock Formations

4. IDENTIFICATION OF IMPLEMENTABLE PROJECTS

FROM INTEGRATED WASTE MANAGEMENT PLAN

1. Authorise existing Niekerkshoop and Marydale for operations (2009) (R500 000)
2. Construction of guardhouse, ablution facilities & fencing at Phillipstown & Vanderkloof Landfill Sites up to 2010 (R465 000)
3. Audit Landfill Sites (twice yearly) (R50 000 per annum – add escalation)
4. Start recycling initiatives

FROM IDP

1. Asbestos Rehabilitation

Background

The Prieska Area in Siyathemba Municipal Area was richly settled with Asbestos. It was good for the Economy but not for socio-economy. As a result of the former mining of asbestos there is the * of rehabilitating the asbestos areas.

LOGISTICAL FRAMEWORK

Priority	Objectives Verifiable Indicators	Means of Verification	Risks and Assumptions
Goal The rehabilitate the asbestos area for health reasons	To secure a safer environment for the people	Ground still a health threat	-Workers might get sick -Might distributed asbestos into the air/atmosphere Health hazards
Output A safer environment for Siyathemba Municipal community			
Activity The depositing of special sand over the	Responsibility Municipality Dept. of Health	Time Frames	Cost

infused ground	Contractor Consultant		

2. Upgrading and Greening of Public Spaces. [chapter 4, p 83]

Background
The Siyathemba Municipality is a very big Area. Most of the area is dusty and dry. Upgrading and greening of this spaces will only refresh the outlook of the area.

LOGICAL FRAMEWORK

Priority	Objectives Verifiable Indicators	Means of Verification	Risks and Assumptions
Goal Upgrading and greening of public spaces	To attract tourists that passes by the area	Tourism development	Disturbing nature.
Outputs A more beautiful and refreshed Outlook over the area. Create jobs for the unemployed			
Activity Planting of grass and trees etc.	Responsibility Municipality Dept of Environmental Affairs and Tourism Consultants Contractors	Time Frame	Cost

3. Upgrading of Museum.

Infrastructure improvement (with implies environmental impact) [Chapter 4, p 1 and p 30-40))

- Sanitation - Changed from VIP to full borne systems

- Build Pipeline from Orange River to Niekerkshoop
- Build Pipeline from Orange River to Marydale
- Upgrading of Sewerage Infrastructure
- Upgrading of Landfill in Marydale to DWARF standards

Socio-economi improvement with environmental implication

- Community food garden

Background

Poverty and unemployment brings a problem of food security which causes hunger to many households.

Logical Framework

Priority To address poverty and hunger through food garden	Objectives Verifiable Indicators Assist community to right hunger and poverty	Means of Verification	Risks and Assumptions
Goals To establish sustainable food gardens			
Outputs			
Activity 1. Identify land 2. Identify beneficiaries	Responsibility Municipality Department of Agriculture Social Development Health	Time Frame	Cost

- **Improvement of waste management in the Siyathemba Municipality**

BACKGROUND
The people of Siyathemba are currently in a culture to dump their waste in the streets and open areas.

LOGICAL FRAMEWORK

PRIORITY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	RISKS & ASSUMPTIONS
Goal To create a culture to recycle and reduce informal dumping	To reduce informal dumping		That people shall learn to recycle and stop dumping
Activity To held workshops with people in towns to explain to them to recycle and not dump waste in streets.	Responsibility Local Authority DWAF Karoo District Municipality	Time Frame 2007/08	Cost R1 021 500-00

Economic development

- Identify land suitable for Agriculture development
- Fish farming
- Tiger eye mining

ALSO REFER TO GENERIC ISSUES, STRATEGIES AND OPPORTUNITIES TABLE

Generic Municipal Issues, Environmental Impacts, Strategies & Opportunities/Projects

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Informal Residential • Low density urban, • Informal, high density urban, • Informal, low density rural, • Informal, high density rural	1. Housing Backlog 2. Lack of availability of land for settlements (most land privately owned). 3. Housing projects 4. Illegal evictions from farms – people move to settlements which can not accommodate them. 5. Dumping due to insufficient refuse removal. 6. Dust Pollution because of little vegetation cover. 7. Burning of wood – removal of vegetation adjacent to informal settlements. 8. Replacement of bucket system – technologies available is not viable & appropriate.	• Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species. • Fragmentation of ecological area, subdividing large populations by causing a barrier. • Scenic impact. • Depletion and degradation of soils may lead to unproductive soils. Decrease of water infiltration and increase the water run-off (flood potential). • Pollution of air – due to open cooking fires • Flooding may occur due to no management of storm water runoff. • Water quality most adversely influenced	**Strategies:** 1. Sewer system management. 2. Consider soil conditions in particular – no septic system on slate, shale or clay soils. 3. Storm water planning to make storm water available for urban agriculture. 4. Formalize informal settlements. 5. Labour intensive projects in informal settlements **Legal requirements:** 1. Environmental and Heritage Impact Assessment (EIA and HIA) required for land use changes, under NEMA, ECA and NHRA 2. Expansion and formalization of	1. Small contracts for SMME, regarding maintenance or small capital projects – training required. 2. Urban agriculture such as olive and citrus, harvest on contract to distributors. 3. Small scale urban agriculture production. 4. Cleaning programme currently implemented must be continued and encouraged. 5. Environmental education against wood collection in the adjacent veld to prevent degradation & erosion. 6. Urban renewal and greening for dust prevention. Soil stabilisers can be investigated in crucial areas. 7. Investigation or project

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
		by organic and microbiological pollution due to human activities. • Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.	settlements to be in accordance with IDP and SDF 3. Water Services Act	to determine most suitable alternatives for bucket system that does not need lots of water.
Formal Residential • Low density (plot sizes > 1500m2), • Formal, normal density (plot sizes 500m2 - 1500m2), • Formal, medium density (shared plots, single & double storey), • High density (multi storey units in complex)	1. No land available at this stage	• Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species. • Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences. • Scenic impact. • Pollution of air. • Flooding may occur in floodplains due to construction being too close to the stream or river edge. • Water quality most	**Strategy:** 1. Densification rather then expansion, development by subdivision of large residential plots. 2. Strategic Environmental Plan for local Municipality. **Legal requirements:** 1. EIA according to ECA. 2. Physical Planning Act 3. Development Facilitation Act 4. Northern Cape Planning and Development Act 5. Cape Land Use	1. SMME waste removal. 2. Service and maintain areas through SMME's, side walks etc. in partnership with the municipality – work towards a municipal service contract. 3. Survey on plot sizes and opportunities for development, densification

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
		adversely influenced by organic and microbiological pollution due to human activities. • Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.	Planning Ordinance.	
Open Space *1.* Most of the existing soft open spaces, especially in the informal residents areas, are unkempt and therefore creating an unsafe environment *2.* The park in the informal areas of the three towns are mostly overgrown and unkempt, making is attractive dumping sites that lead to unsafe and polluted areas within the residential areas.	1. Almost no open space planning has been done in most of the towns. 2. Lack of Formal Sports field in many of these townships. 3. Informal settlements in open areas (public open spaces) 4. Floodplain areas cause a safety risk, as no detailed flood line determinations have been done in most towns. Informal settlement also takes place below the flood line.	5. Human Health 6. Safety		**Open Space and Landscape Plans** (OSLP) - Decision support tool and a spatial planning tool that can assist in the promotion of sustainable management of open space within the area of each Municipality. **(This forms part of Urban Renewal. – Also refer to Urban Renewal Guidelines)**
Commercial 1. Free Trade Zones. 2. Trade Zones. 3. Shopping Centres. 4. CBD Commercial	1. CBD Areas have no public toilets. 2. CBD often lacks identity & legibility	7. Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species. 8. Fragmentation of natural area, subdividing large	**Strategies:** 1. Healthy CBD stimulation against decentralization. 2. Beautification by tree planting etc for	1. Olive oil industry, small scale farmers, joint ventures. 2. Greening of town CBD, growing plants for side walks etc.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
5. Grain Silos		populations by causing a barrier. 9. Scenic impact. 10. Pollution of air. 11. Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.	ecological disadvantages in CBD 3. Spatial planning to make CBD attractive for tourists. 4. Develop ablution facilities for CBD Areas. **Legal requirements:** 1. Occupational Health and Safety Act 2. EIA for new development 3. Atmospheric Pollution Prevention Act. 4. Hazardous Substances Act 5. Health Act	3. Proper CBD Planning is part of Urban Renewal 4. Manufacturing of street furniture banners and other image creating elements. 5. Security contracts such as organised car protecting services. 6. Link to other regional distribution centres 7. Investigate establishment of free trade zones around airport in the district 8. Continue to investigate re-use of buildings associated with airports for other types of facilities.
Leisure & Tourism 1. Hotel - large (more than 100 rooms), 2. medium (30 - 100 rooms), 3. small (less than 30 rooms), 4. Guest house, 5. Resort - detached units in a rural or natural setting outside urban areas, 6. Caravan Park / Site, Casino,	1. Tourism information in the study area is not always accessible & legible to a tourist moving through the area. Booklets of specific tourist attractions is not being distributed through the country	1. Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species. 2. Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned.	**Strategies:** 1. Focus on agricultural tourism. 2. Concentrate to conserve what is left, 3. Combine conservation with development. **Legal requirements:** 1. EIA for new development.	4. Audit L and T facilities – training required for SMME's 5. Maintenance contracts for all monuments and sites. 6. Food oriented tourism development 7. Maintenance of resorts, planning and SMME opportunity. 8. Tourism marketing

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Golf Course		3. Scenic impact. 4. Pollution of air. 5. Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation	2. National Water Act **3.** Environmental Conservation Act.	exercise (to the entire country) is required. 9. Gateway / entrance design for each town is required. 10. Tourism info centre is required for each town. 11. Signage must be improved for all tourism facilities. 12. Ramble routes must be developed within each local municipality to link all tourism establishments with the info centre.
Game & Hunting Lodges 1. Game & hunting lodges, 2. Eco-lodge (low impact facilities in a natural environment)	1. Only 1,2% of land cover utilized for game farming. 2. New developments to be done in consultation with IEMP	1. Destroy indigenous biodiversity. 2. Selective hunting of target species alters genetic constitution of natural populations; non-target species may be affected by management practices that favour increased population numbers of charismatic and hunted species. 3. Trail and disruption caused by vehicles may functionally fragment populations especially	**Strategy:** 1. Not to be stimulated in this area.	

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
		insofar small-bodied, less mobile or cryptic species are concerned. 4. Scenic impact.		
Trails 1. 4x4Trail, 2. Motorbike Trail, 3. Equestrian Trail, 4. Hiking Trail	1. Not present in this area. 2. Potential for hiking trials.	3. Destroy indigenous biodiversity; in gardens indigenous flora are substituted with exotic species. 4. Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned. 5. Scenic impact.	**Strategy:** 1. Stimulate agricultural related trials, like olive and wine routes etc. 2. Hiking trials within natural areas. **Legal requirements:** 1. Conservation of Agricultural Resources Act. 2. Environmental Conservation Act	1. Maintenance contracts Trial guides – training 2. Trials linked to agriculture and related initiatives.
Animal Husbandry 1. Cattle farming, 2. Cattle, large (more than 1000ha), 3. Cattle, medium (250ha - 1000ha), 4. Cattle, small (less than 250ha), 5. Cattle, high density feeding lots, 6. Dairy Farming, 7. Poultry farming, 8. Ostrich farm, 9. Sheep farming,	1. Of the total surface area, 29,6% is used for livestock. 2. Informal settlements. Keeping of livestock in urban areas. Possibility of outbreak of pests or diseases. 3. Low carrying capacity makes area extremely vulnerable to land degradation & erosion.	1. Destroy indigenous biodiversity; 2. Non-selective overgrazing and trampling causes the replacement of late successional grasses with less nutritional, early pioneer grasses, the loss of herbaceous annuals, exposure of bare soil and subsequent erosion. 3. High density cattle farming leads to total destruction of indigenous vegetation that may result in subsequent erosion.	**Strategies:** 1. Avoid ecological sensitive areas such as close to the river. 4. Programs to monitor points of pollution. 5. Stimulate farm labour ownership and/or partnerships. 6. Encourage and provide farm labour training. 7. Stimulate small scale economic viable business enterprises. 8. Situation analyses,	1. Promote utilisation and co-operation with NC research institutes. 2. Leather works from various skins. 3. Small scale poultry farming 4. Small scale breeding operations. **5.** Investigate aqua culture link to hydroponics. **6.** Broad Scale education on veld management – farmers, land owners and

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
10. Sheep large (more than 1000ha), 11. Sheep medium (250ha - 1000ha) 12. Sheep small (less than 250ha) 13. Pig farm, 14. Crocodile farm, 15. All goats farming 16. Mixed grazing		4. The deposition of abnormal amounts of manure increase soil acidity and prohibits recovery of indigenous species for prolonged periods. 5. Water quality most adversely influenced by organic and microbiological pollution due to animal wastes or activities.	location of small farms, wind direction etc. **Legal requirements:** 1. ECAct 2. Conservation of Agricultural Resources Act. 3. Fertilizers, Farm Feeds, Agricultural Remedies Act. 4. Health Act. 5. Agricultural Pests Act 6. National Water Act 7. Occupational Health and Safety Act	communities.
Crop Farming Agriculture 1. Irrigated agriculture (all farm sizes), 2. Mono-culture agriculture, large (more than 1000ha), 3. Mono-culture agriculture, medium (250ha - 1000ha), 4. Mono-culture agriculture, small (less than 250ha), 5. Mono-culture agriculture, subsistence. 6. Rain-fed crops. 7. Nurseries	1. throughout the area 2. Seasonal migrant workers working on farms. 3. High water table on farms. 4. Volatility of crop farming. (sudden climatic changes can destroy the whole industry)	1. Destroy indigenous biodiversity. 2. Area is homogenized and ecosystem functioning on cultivated land is essentially simplified to production of bio-mass. 3. Depletion and degradation of soils may lead to unproductive soils. Build up of salts. 4. Water quality most adversely influenced by the use of inorganic fertilizers or pesticides during the cultivation of	**Strategies:** 1. Do not stimulate water dependent farming. 2. Stimulate farming with indigenous crops such as Aloe. 3. Focus on new irrigation techniques. Water use efficiency. **Legal requirements:** 1. Conservation of Agricultural Resources Act. 2. Fertilizers, Farm Feeds, Agricultural	1. Focus on dry land production and/or using recycled water in intensive crop production. 2. Encourage current research institutions to do appropriate research on dry land crop production. Make information available to the Municipalities 3. Establish: Medicinal plant, Aloe, Herb, essentials oil plants and cut flower nurseries. – bee (honey and wax)

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
		crops, leaching to underground water.	Remedies Act. 3. Agricultural Pests Act 4. National Water Act	industry link after establishment. 4. Investigate the alternatives of packaging such as making muslin bags for olive packaging 5. Develop policy framework for urban agriculture 6. Take educational programs to schools regarding farming in the area.
Aquaculture	1. Opportunity	1. Destroy indigenous biodiversity. 2. Area is homogenised and ecosystem functioning on cultivated land is essentially simplified to production of bio-mass. 3. Water quality most adversely influenced by either organic and microbiological wastes due to the raising of animals or the use of inorganic fertilizers or pesticides during the cultivation of crops.	**Strategy:** 1. Stimulate small scale aquaculture projects. 2. Stimulate water re-use projects	1. Aqua culture can be located in any municipality where waste water can be utilised

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Game Farming 1. Game farming, large (more than 4000ha), 2. Game, medium (600ha - 1000ha), 3. Game, small (less than 600ha)	1. Game farming on small scale.	1. Destroy indigenous biodiversity. 2. Selective hunting of target species alters genetic constitution of natural populations; non-target species may be affected by management practices that favour increased population numbers of charismatic and hunted species. 3. Trails and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned.	Not to be encouraged.	1. Concentrate on domestic animals. 2. Goat milk and meat production for small farmers.
Mixed Agriculture 1. Mixed agriculture (livestock & crops), large (more than 1000ha), 2. medium (250ha - 1000ha), 3. small (less than 250ha), 4. subsistence, 5. Communal Grazing system	1. Expansion of urban area could have impact on agricultural land bordering urban areas. See under informal and formal settlements.	1. Destroy indigenous biodiversity; 2. Non-selective overgrazing and trampling causes the replacement of late successional grasses with less nutritional, early pioneer grasses, the loss of herbaceous annuals, exposure of bare soil and subsequent erosion. 3. Area is homogenised and ecosystem functioning on cultivated land is essentially simplified to production	**Strategy:** 1. Planning areas for communal use. (Permit system etc.) 2. Stimulate small scale permaculture and vegetable production. **Legal requirements:** 1. As with crop and animal farming	1. Establish local compost and organic soil industry linked to earth worms industries. 1.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
		of bio-mass. 4. Depletion and degradation of soils may lead to unproductive soils.		
Forestry 1. Large scale forestry, 2. Small scale commercial forestry (less than 10ha), 3. Subsistence forestry (firewood etc.)	1. Although areas are electrified households still use wood fires for cooking and heating which leads to air pollution – subsistence forestry. 2. Alien invader species along the riverine areas.	1. Destroy indigenous biodiversity. 2. Scenic impact. 3. Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.	**Strategy:** 1. Stimulate selective harvesting. 2. Concentrate on exotic or invader plants. 3. Stimulate small business ventures such as charcoal production and furniture industry. 4. Link to "Working for water" program. **Legal requirements**: 1. Nature and Environmental Ordinances. 2. National Forest Act	1. Promote working for water programs. 2. Promote removal of alien vegetation – link to fuel for cooking and heating, charcoal, furniture and basket weaving industries. Note - indicate the legislation requirements. 3. Link up with Working for Water – DWAF initiative against alien species invasion.
Industrial 1. Heavy industrial - metal smelting, 2. chemical processing, assembly plants, other, 3. Medium industrial- chemical processing, other, 4. Light industrial, Workshop, 5. Agricultural processing	1. Local communities partnerships lacking.	1. Destroy indigenous biodiversity. 2. Fragmentation of natural area, subdividing large populations by causing a barrier that is difficult to cross. 3. Scenic impact. 4. Materials used may be toxic to fauna and flora	**Strategy:** 1. Business plans for small enterprises. 2. Environmental audit on all businesses. Compliance with legislation 3. Capacity building programs. 4. Investigate alternative	1. Investigate waste recycling for new innovative products. 2. Promote collection of paper and cans for recycling. 3. Manufacturing of ready-made furnishings and building elements from waste material.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
plants on agricultural land		and may also induce genetic changes between generations. 5. May lead to pollution caused by emission of by-products. 6. Air and noise pollution. 7. The possibility of leakage/ spillage may pollute the soil, surface and groundwater. 8. Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.	use of waste products. 2. Infrastructure analyses to support industry.(e.g. roads, water etc.) 3. Stimulate processing plants, e.g. olive and other oil plants etc. **Legal requirements:** 1. ECAct 2. Conservation of Agricultural Resources Act. 3. Health Act. 4. Agricultural Pests Act 5. National Water Act 6. Occupational Health and Safety Act **7.** Atmospheric Pollution Prevention Act.	
Mining 1. Open cast mine, 2. Open cast mine with drag line, 3. Underground mine, 4. Sand works, 5. Clay quarry associated with brickworks, 6. Other clay quarries, 7. Gravel quarry for road fill,	1. Very little mining is being done although huge mineral resources exist.			1. A mining marketing study must be done to assess viability of mineral resources. 2. These viable mining options must be further investigated and big mining houses invited for partnerships in the area. 3. These mining opportunities will in turn offer opportunities in terms of beneficiation for of these

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
8. Rock quarry for construction aggregate, 9. Rock quarry for blocks or slabs of rock, 10. Salt works				minerals, for example, cutting and polishing factories, jewellery manufacturing, tiger's eye processing plant, uranium as an alternative source of fuel; and table salt manufacturing.
Airports 1. International airports. 2. Regional airports, 3. Small airports. 4. Public and private landing strips	1. Air field at ammunition depot. Not utilized infrastructure. 2. Air field only used for private light aircraft.	1. Destroy indigenous biodiversity. 2. Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences. 3. Cause increase mortality in birds of prey if incorrectly designed. 4. Pollution of air. 5. The possibility of leakage/ spillage may pollute the soil, surface and groundwater. 6. Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation.	**Strategy:** 1. Stimulate growth and market as tourism opportunity. 2. Stimulate as export opportunity for products such as flowers etc. 3. Avoid the destruction of high bio-diversity areas for new landing strips. **Legal requirements:** 1. Environmental Conservation Act 2. Shipping and Civil Aviation Laws Rationalisation Act. 3. Airport Company Act. 4. South African Civil Aviation Authority Levies Act.	1. Investigate optimum utilisation of airports for tourism, export of products. 2. Promote fly in tourism linked to agri-tourism and scientific research. **3.** Establish free trade zones around airport – link to other industries in the region – such as Upington.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Power Stations Alternative Power 1. Electricity generation facilities, 2. Coal powered stations, 3. Hydro electricity generators, 4. Wind electricity generators (commercial only), 5. Bio-electricity generators (commercial only)	1. Not applicable to this municipality			
Parking, Related Structures & Facilities 1. Parking lot, 2. Taxi rank, 3. Bus or heavy vehicle depot, 4. Filling station, 5. Vehicle service facility, 6. Traffic control centre, 7. Dirt road with high traffic loads, 8. Dirt road with low traffic loads.	1. Taxi ranks along the main roads.	1. Destroy indigenous biodiversity. 2. Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences. 3. Roads and other tourism related structures may cause fragmentation of large populations (especially of cryptic animals) and behavioral changes induced by tourism activity. 4. May lead to pollution caused by emission of by-products. 5. Pollution of air	**Strategy:** 1. Audit all taxi stands, upgrade facilities.	1. SMME contracts for the maintenance and construction of new facilities. 2. Construction of labour intensive paving and roads

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Roads 1. Roads 2. Double carriageway highway, 3. Tarred road with 120km/h speed limit, 4. Tarred road with 80km/h speed limit, 5. Tarred roads with speed limits below 80km/h	1. Road upgrade at other towns such as Pampierstad etc. 2. Construction of roads necessitates gravel borrow pits. 3. Road construction leads to deforestation. 4. New roads lead to higher volume of storm water run off. 5. Lack of integration between historically divided areas in settlements, normally transected by the N-routes. 6. Storm Water Management not up to standard – risk for human health & erosion.	1. Destroy indigenous biodiversity; 2. Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences. 3. Roads and other tourism related structures may cause fragmentation of large populations (especially of cryptic animals) and behavioral changes induced by tourism activity. 4. Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water. 5. Scenic impact. 6. May lead to pollution caused by emission of by-products. 7. Pollution of air	**Strategy:** 1. Road audit within the municipal area. 2. Road upgrading by labor intensive methods. **Legal requirements:** 1. Mineral and Petroleum Resources Development Act (quarries) 2. Advertising on Roads and Ribbon Development Act. 3. Environmental Conservation Act	1. Lack of integration should be addressed by urban renewal projects such as gateway design, signage, general upliftment of previously disadvantaged communities etc. 2. Storm water management plans required for all towns.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Railways, Related Structures & Facilities 1. Railway structures, 2. Railway lines, 3. Stations, 4. Shunt yards & workshops, 5. Railway bridges	1. Main railway line through Municipal area. 2. Mainly used to transport cargo	1. Destroy indigenous biodiversity. 2. Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences. 3. Roads and other tourism related structures may cause fragmentation of large populations (especially of cryptic animals) and behavioral changes induced by tourism activity. 4. Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water. 5. Scenic impact. 6. May lead to pollution caused by emission of by-products. 7. Pollution of air	**Strategy:** 1. Make trains more user friendly. 2. Link to tourism potential.	1. Servitude – investigate utilisation for biking, hiking and horse trials.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Pipelines, Cable Networks 1. Pipeline for the transportation of hazardous substances including petroleum products, 2. Water bulk supply pipelines, 3. Cable networks, 4. Telephone lines and associated structures, 5. Industrial cable way and associated structures, 6. Tourism cable way and associated	1. Electrification of informal settlements/residential areas deforested for high voltage cables and servitudes 2. Water pipes for bulk water old. 3. Storage reservoirs needs attention, old and leaking.	1. Destroy indigenous biodiversity. 2. Fragmentation of natural area, subdividing large populations by causing a barrier that is extremely difficult to cross, with genetic consequences. 3. Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water. 4. Scenic impact.	**Strategy:** 1. Audit water and sewage networks and capacities. 2. Demand and supply audit in co-operation with Eskom for the Municipality's future needs. **Legal requirements:** 1. EIA's for new networks necessary.	1. SMME maintenance and installation contracts. 2. Focus on extended DPW programmes.
Water storage 1. Water storage and supply structures as well as structures affecting the flow of water in rivers, 2. Bulk water supply/storage dam, 3. Farm dam, 4. Inter catchments water transfer scheme, Reservoirs for public water supply, 5. Levees, 6. Weirs	1. Upgrade bulk water at 2. Canal leaking and very old 3. All reservoirs are old and capacity not sufficient.	1. Destroy indigenous biodiversity. 2. Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water. 3. Scenic impact.	**Strategy:** 1. Water audit and strategic plan in relation to Water Services Plan (WSDP) 2. Small projects to repair canal and other bulk supply network. 3. Audit all boreholes. 4. Regular water testing from boreholes **Legal requirements:** 1. National Water Act.	1. SMME maintenance and installation contracts. 2. Focus on extended DPW programmes.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
			2. Water Services Act. 3. Water Act.	
Towers and masts, Conveyors 1. Microwave towers (telecommunications), 2. Radio transmission towers and masts, 3. Cellular phone network masts, 4. Wireless loop telecommunication masts, 5. Radar masts, 6. Reception dishes and structures, Industrial conveyor - long distance (>1km), Industrial conveyor	1. Visual impact of cellular base stations is often negative. 2. By-laws and regulations required regarding positioning of base stations especially in rural areas.	1. Destroy indigenous biodiversity. 2. Cause increase mortality in birds of prey if incorrectly designed. 3. Scenic impact.	**Strategy:** 1. Strategic plan for site selection in and around towns. 2. Avoid natural areas such as ridges etc. **Legal requirements:** 1. EIA assessments for cellular base stations.	1. Promote utilisation of masts for raptor and large bird nesting – artificial nesting.
Conservation 1. All conservation area, 2. National park, 3. Provincial nature reserve, 4. Regulated natural area, 5. Natural heritage site, 6. National monument, 7. Marine reserve, 8. Local authority conservation area, 9. Private nature reserve, 10. Urban open space area	1. No areas conserved. Game farming only 1,2% which can be seen as conservation of land.	1. Destroy indigenous biodiversity.. 2. Trail and disruption caused by vehicles may functionally fragment populations especially insofar small-bodied, less mobile or cryptic species are concerned. .	**Strategy:** 1. Develop a conservation strategy for the municipal area. 2. Identify natural areas to be protected. 3. Identify no-go development areas. **Legal requirements:** 1. All legislation as for Game farming etc. EIA's are important**.**	1. Conserve areas such as ridges and other sensitive areas. 2. Promote the conservation of all wetland areas.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
Waste sites, Sewage treatment 1. Household waste landfill, 2. Class 2 waste landfill, 3. Class 1 waste landfill, 4. Waste indicator, 5. Radioactive waste site, 6. Sewage disposal structures, 7. Sewage treatment plants, 8. Off- shore disposal pipelines, 9. Sewage pipelines (MAIN)	1. Waste management plan 2. Upgrade bulk sewerage works 3. Landfill Sites without approvals and in close proximity to human settlement. 4. Littering has negative effect on tourism. 5. Problems with the sewage treatment plant. reached its full capacity.	1. Destroy indigenous biodiversity.. 2. Prevention of natural floods leads to the alternation of natural flow of rivers that may cause deposition of silt that shallows river bed and may have consequences for aquatic species that are dependent on deep or fast flowing water. 3. These materials may be toxic to fauna and flora and may also induce genetic changes between generations. 4. May lead to pollution caused by emission of by-products. 5. Pollution of air. 6. The possibility of leakage/ spillage may pollute the soil, surface and groundwater.	Strategy: 1. Investigation and viability study on the total sewage system. 2. Refer to IWMP recently completed	1. Ongoing process of formalizing sanitation to include water borne systems and address the backlog that currently exists. The use of dual flush systems to conserve water should be implemented. 2. Refer to IWMP recently completed.
Hazardous Materials Handling, and manufacturing 1. Hazardous materials transportation route, 2. Hazardous materials handling facility, 3. Hazardous materials processing facility, 4. Hazardous materials storage	1. Waste management plan. 2. Hazardous waste being transported on N-Routes and spilled in towns.	1. Destroy indigenous biodiversity. 2. Radioactive elements are carcinogenic and cause genetic mutations between generations. 3. May lead to pollution caused by emission of by-products.	**Strategy:** 1. Refer to integrated waste management plan just completed.	1. All hazardous waste spillages or emergencies must be properly documented before any action can be taken to determine the exact extent and frequency. 2. Safe sleepover areas must be designed and built away from the residential

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
facility, 5. Hazardous materials manufacturing facility		4. Pollution of air. 5. The possibility of leakage/ spillage may pollute the soil, surface and groundwater. 6. Overall very high impact on vegetation that usually result in the complete or partial destruction of both the vegetation and the top layers of soil often further exacerbated by inadequate rehabilitation. 7. Scenic value destroyed.		area of each town. 3. Determine the main companies transporting waste of this nature and do spot checks of their permits as they enter each town in liaison with Traffic Dept. 4. In serious instances whistle blowing to DTEC or even DEAT can become necessary.
Advertisement 1. All advertisement. 2. Posters and other general signs. 3. Signs on buildings, structures and premises. 4. Signs for the tourist and traveller. 5. Mobile signs, 6. Billboards and other high impact free standing structures	1. Not currently addressed in IDP or other policy statements	1. Destroy indigenous biodiversity. 2. Scenic impact.	**Strategy:** 1. Abide by the requirements; SA manual for outdoor advertising control (DEAT)	1. SMME manufacturing of unique, wood, fabric or painted local signs.
Fuel Stations 1. Petrol/Diesel Filling Stations, 2. Fuel Storage Facilities, 3. Fuel Refineries,	1. Full EIA assessment for new filling stations. 2. Location of new filling stations/ fuel storage facilities/refineries to be addressed in Spatial	1. Destroy indigenous biodiversity. 2. These materials may be toxic to fauna and flora and may also induce genetic changes	**Strategies:** 1. Storm water planning in all towns. 3. Oil handling and disposal audit needed.	

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
	Development Frameworks in conjunction with IEMP.	between generations. 3. May lead to pollution caused by emission of by-products. 4. Pollution of air. 5. The possibility of leakage/ spillage may pollute the soil, surface and groundwater.	4. Encourage recycling initiatives. **Legal requirements:** 1. Full EIA assessment for new filling stations. 2. Location of new filling stations/ fuel storage facilities/refineries to be addressed in Spatial Development Frameworks in conjunction with IEMP.	
Heritage 1. Structures 2. National Monuments 3. Artifacts 4. Rock Paintings 5. Battlefields 6. Museums 7. Mission Stations	1. Historical sites 2. Archaeological sites 3. Cultural sites 4. Scientific and ecological sites	1. Roads and other tourism related structures may cause fragmentation of large populations (especially of cryptic animals) and behavioral changes induced by tourism 2. Destroy indigenous biodiversity. 3. May cause pollution, littering etc by visitors.	**Strategy:** 1. Assessment of all possible historic sites, ruins, structures and graves. 2. Inventory of all archaeological artifacts in the area. 3. Heritage site, such as bushman paintings, must be identified. 4. Scientific important ecological sites must be identified and registered. 5. Focus of above should be to link this with tourism exploitation possibilities. **Legal requirements:**	1. Complete audits as required – training. 2. Liase with agriculture to develop strategy for agri-tourism, heritage sites. 3. Promote links to tourism industry. 4. Complete conservation plans as required. 5. SMME's maintenance of monuments and sites. 6. Identification of new sites to be listed under the NHRA.

Categories of Development	Some Specific Municipal Issues	General Environmental Consequences	Strategies and legislation to address environmental issues for the Municipality	Opportunities / Projects
			1. National Heritage resources Act 2. Environmental Conservation Act 3. National Environmental Management Act	

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URBAN RENEWAL GUIDELINE DOCUMENT

PIXLEY KASEME INTEGRATED ENVIRONMENTAL MANAGEMENT PLAN:

URBAN RENEWAL PROJECTS AND PRINCIPLES FOR TOWNSHIPS AND HUMAN SETTLEMENTS

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1 SPECIFIC PROJECT PROPOSALS: SMALL-SCALE INTERVENTIONS

The following small-scale interventions have been identified for implementation in public open spaces within towns and especially townships and informal settlements within the Pixley Ka Seme District Municipality (PKSDM). These projects have been selected based on past experience from open space development and urban renewal projects in Galeshewe in Kimberley and the PKSDM Local Municipality and have been developed in conjunction with both the relevant municipalities and communities and interest groups from both these areas. It is however important to note that these proposals are conceptual only and intended to guide thinking and design efforts for the remaining open spaces within the various settlements within PKSDM. Minimum and general guidelines for each project type are as follows:

1.1 CHILDREN PLAY AREAS

- A minimal area of paving of approximately 100 square metres of non-slip paving material with adequate drainage should be provided for general play and as a potential multi-purpose area where other recreational activities can take place.
- A minimal set of play equipment for pre-school children.
- A minimal set of play equipment for primary school children
- Two benches set on the paving and in close proximity and close to pre-school play areas for mothers to keep eye on their children.
- A minimum of three shade trees – one set in the paved area and two adjacent. Additional shade trees can be allowed along the periphery of larger spaces, which will help with spatial delineation. However care must be taken that sight lines around street corners, as well as to entrances to the park (both pedestrian and possibly vehicular) are not obscured.

1.2 SIDEWALK IMPROVEMENTS

- Due to the drought, harsh sunlight and lack of vegetation, shade trees should be provided wherever feasible, along all sidewalks along roads and streets – one approximately every 10 metres. Hardy species that are adapted to this region should be used and should preferably be indigenous, although non-invasive exotics such as *Schinus molle* may also be utilised. In urbanised areas it is beneficial if the trees are arranged in patterns and alternate with the

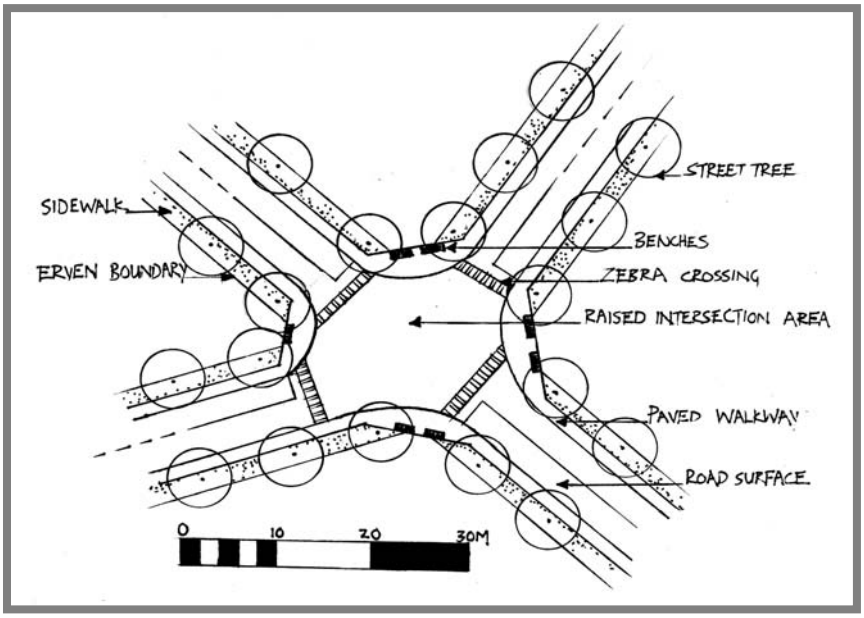
streetlights, however along larger roads or in more rural areas and where roads transect or border natural areas, trees should be irregularly spaced or clumped to simulate more natural groupings.

- Where financially feasible paved walkways should be provided along all streets and roads frequently used by pedestrians. This is specifically important within the rural township areas, since the streets are extremely dusty here and washed away due to bad storm water management programmes.
- One seating area should be provided every 200 meters along major pedestrian and vehicular routes.
- Adequate lighting for evening comfort and user safety is essential. Especially in the rural townships, adequate night time lighting is crucial as often informal settlements expand at a faster rate than at which services are implemented. In these areas high-mast lighting are effective at illuminating large areas, especially public areas. During a survey done for the Galeshewe Open Space and Landscape Plan (GOSLP; 2004) a significant number of residents indicated that although these lights are not particularly attractive, they prefer these lights to standard street lights, or a combination of standard and high mast lights to standard street lights only, as safety is often greater in such areas.

1.3 SAFE ROAD CROSSINGS

- Road crossings can form an integral part of the open space network of any neighbourhood or city, especially in instances where pedestrian activity is prevalent. Often street corners are significant social interaction areas within townships and rural settlements. Street vendors use these spaces to peddle their wares, commuters wait for taxis and people meet each other here to go to mutual destinations. Subsequently these spaces should be both safe and accommodating to the needs of pedestrians and vehicle users.
- Sidewalks should ideally be provided on all four corners of intersections, to increase pedestrian safety and usability. These elements should be considered a minimum where high amounts of pedestrian and vehicular traffic have to interact.
- Signage that indicates to the drivers to stop at the stop sign must be provided.
- Seating areas should be provided near at least two sides of the intersection, with litterbins and adequate lighting.
- Raised areas should be created in the intersection of the two streets. This is again true where large amounts of pedestrian traffic must interact with vehicular traffic, such as busy streets in the rural townships.

- Zebra crossings should be painted on the road surface. In busy streets where vehicles travel at high speeds, the raised area can be created from another material, to enhance its visibility.



1.4 SOCIAL AREAS AT COMMERCIAL CENTRES

1.4.1 Larger Towns and Urban Centrums

- Ideally commercial centres and shopping complexes should be placed in close proximity to public parks, so that people have the option of enjoying lunch, strolling or recreating in other ways before or after they go shopping. It is much more likely that especially larger parks or passive recreation places will be more frequently used if they are associated with activity centres, than if they are located far from public amenities. It is therefore crucial that the remaining public parks or open spaces within all towns within PKSDM be retained and properly maintained and that where feasible, small retail outlets or other attractions be provided close to these spaces.
- All remaining indigenous trees and larger non-invasive exotic trees should be retained in these spaces however invader species, vegetation that excessively obscure views through these spaces and may potentially pose hiding places for criminals, should be removed. Furthermore small, secluded pockets of planting that attract littering should be avoided.

1.4.2 Township Areas

- In rural townships social areas at commercial centres are particularly important as they often play a significant role in communal life, and should be within walking distance of the commercial centre.
- A minimal area of paving of approximately 100 square metres should be provided at an open area close to the shops, to allow for a variety of different social activities. If feasible small lawn areas should be provided adjacent to the paved sections, to facilitate mothers and children, or more leisurely recreation. Where lawn cannot be established due to lack of irrigation water, small areas of synthetic playing surfaces or sandpits may be considered.
- Vehicular access to such spaces should be restricted by bollards or non-mountable kerbs, in order to prevent misuse as taxi ranks or washing areas. However adequate provision for taxis should be made in close proximity to such areas.
- Adequate seating should be set on the paving areas of smaller spaces and should be provided with litterbins and adequate lighting.
- At least one shade tree should be provided per seating area.
- Larger open areas close to significant commercial centres are often used for informal vending, sport, performances and playing music from car stereos. These activities should be catered for by providing adequately paved surfaces. Where vehicular access is required or desirable the areas used by vehicles should be clearly demarcated and separated from areas that may be used by children or for sports activities, with bollards. The distinction between adjoining hard and soft surfaced spaces can be further reinforced by using trees along the periphery, which will increase their appeal.

1.5 ACTIVE RECREATION AREAS

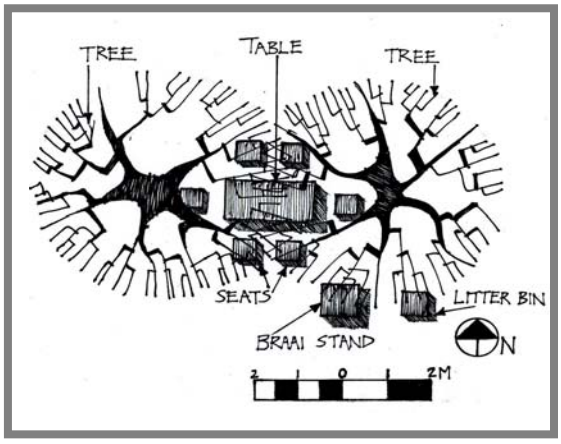
1.5.1 Township Areas

- **Informal soccer field:** The site surveys of some of the township areas within the study area revealed that soccer fields within most of these townships are often in a poor condition and lack lawn, due to a lack of irrigation water and poor soil conditions. Construction of these fields should therefore be of levelled, rolled dirt with a curb installed all around the play area but set back from the play area. Shade trees just outside of the playing area are essential.
- **Netball court with hoops:** Wherever there is space, netball courts should be provided adjacent to or near soccer fields, as often there are very few areas that cater for female sports.

Construction of court should be of rolled dirt with a curb installed all around the play area but set back from the play area.

- A spectator area with adequate trees for shading should be provided at all sports venues. A maximum of approximately fifty spectators must be accommodated at all soccer fields and ten to twenty spectators at netball fields.
- One tree per ten spectators or part thereof must be provided.
- Water facilities such as basins and drinking fountains are important at public sport facilities. These should be designed as robust as possible and all pipes and other working parts must not be accessible by users, save for the fountain nozzle and button.
- Where more frequently used sports facilities are concerned, provision should be made for informal vending. This should be in the form of an appropriately placed hard-surfaced area and possibly permanent vending stands. However these structures should be designed to be robust, vandal proof and must not be removable.
- Benches must be grouped under shade trees.
- Paving areas at the street curb to link with public transportation.
- Trash receptacles should be provided at the seating areas.
- Lighting should also be provided along walkways where possible. High-mast lighting will be particularly effective at larger sports complexes or multiple sports fields.

1.5.2 Picnic Areas



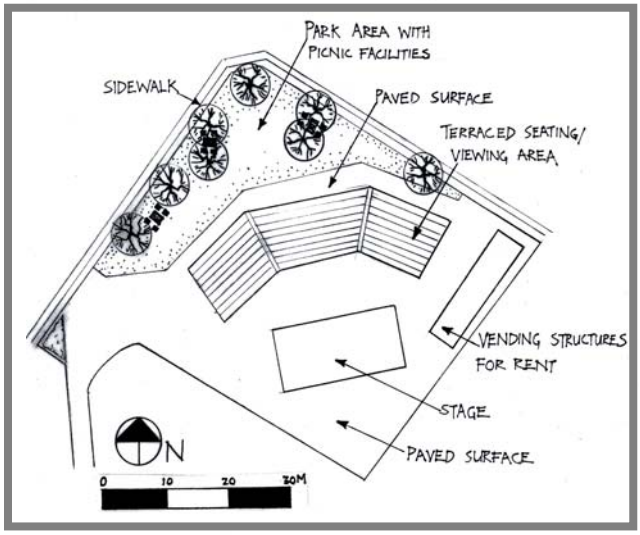
- Picnic areas are essential to any sizeable public park as this is one of the main activities that will ideally take place here. Such areas should be incorporated into all existing parks within the PKSDM and planned for all new parks.
- Larger public parks should have a covered structure of a minimum size of five by eight metres to allow for a variety of uses. Ideally such a structure should also have, or be directly adjacent to, seats and tables.
- The structure should be so located that prevailing cross-winds ventilate it and it should be fully shaded by trees, especially during mid-day and afternoons. Failure to do so will result in uncomfortably hot places that will not be used.
- Where such structures occur in parks / public areas close to centres of significant commercial activity, these structures should be provided with an electricity point, with pay-by-the-minute meters. These must be locked inside a vandal proof box. Keys for these are to be obtained from

municipal representative or park attendants, after payment has been made for use. In this fashion the park can generate a small amount of revenue, which may help to subsidise maintenance.

- Water point with a lockable tap can also be provided. Keys are to be obtained from a municipal representative or park attendant after payment has been made for use.
- Trees should be scattered throughout the space and should have lawn in at least some locations for informal seating on blankets.
- In larger parks a shaded lawn area to allow for large group gatherings should be provided. Trees are to be planted in the lawn areas to prevent informal soccer activities from destroying lawn. In very large parks several spaces of this size can be created, by separating them with rows of trees and other planting. However care should be taken to preserve sufficient visibility to ensure the safety of users.
- Braai areas should be provided on the edge of the lawn areas under the trees to accommodate approximately ten groups of five to ten people.
- For larger parks, a paved road surface should ideally be provided all around the lawn area to allow access to braai facilities. A curb or low fence must be provided to prevent cars from driving onto the lawn.
- Trash receptacles must be provided at every braai stand.

1.5.3 Social Facilities Such as Outdoor Performance Areas or Community Halls

- The versatility and robustness of most large parks can be significantly increased if they are provided with facilities to accommodate ancillary activities, such as performances or gathering areas. This is particularly true for most rural townships, as often there are few structured venues where events such as performances, community gatherings, meetings and larger parties can be facilitated. By providing such facilities in larger parks or near sports venues, the potential uses of the open space are greatly increased.
- A roofed stage area should be provided to accommodate approximately twenty people. For larger facilities electricity points should be provided, for which access can be obtained from a central office, for a refundable deposit. Well-known venues such as a local Tourism Office or Information Centre can provide such services, to avoid the need for additional offices to be built.
- A raised seating area should be provided, to allow for viewing access to the stage area. These structures can be built to accommodate approximately 200 people, although for smaller stages a maximum of approximately 50 people should be catered for.
- A paved area should be created around the stage and seating area to prevent erosion and to provide informal vending and entertainment activities.
- Informal vending stalls should be available to rent for specific events.



- Picnic areas should be created under trees, to allow for multiple uses of the space.
- Safe access routes for pedestrian, cyclists and vehicles are essential and places should be provided where cyclists can secure their bicycles.
- Fencing must be provided around the stage facility area, to allow for the safe locking of the facility when not in use.
- Safe off-street parking areas must be provided where possible.
- An access point on all street intersections must also be provided to allow access to public transportation systems.

1.6 URBAN AGRICULTURE

- Often in townships and rural areas urban agriculture is practiced by individuals in a corner of their yard. Due to the very low average arability of the soil in the region, large scale crop production is not feasible and thus small-scale subsistence and commercial farming should be encourage. Thus the opportunity exists for greater communal urban agriculture and greater co-operation between individual residents.
- Fertilized soil areas that can accommodate approximately five to ten people working on plots of approximately ten by ten metres can be established between two or three individual homes. Thus an area of approximately 100 square metres can be established that are managed and maintained by two or three households. Produce can be grown for own consumption and the surplus sold at local markets or at vendor stands.
- It is essential that urban farmers be assisted financially and in terms of experience in order for organised urban agriculture projects to succeed. Where new townships or extensions of existing ones area planned, the municipality should allocate areas for urban agriculture as described above and provide subsidies to farmers willing to utilise and care for these plots. Subsidies should ideally be in the form of seed and fertiliser with inputs from trained persons, to assist the

farmers in establishing the plots. These patches of farmland will form an integral part of the open or “green” space network within townships and contribute to making them more sustainable.

- Communal water points will be required for successful urban agriculture to take place. Treated effluent water should not be used for the production of crops that will be consumed, as it is very difficult to ensure that the water is properly treated, especially in rural townships where quality control and maintenance cannot be ensured. Instead fresh municipal water must be provided, or grey water from kitchens must be filtered and cleaned. Water from roof collection points can also be utilised and stored in large containers. These containers can be located next to each residence or at a central position serving several residences.

FIGURE 1

FIGURE 2

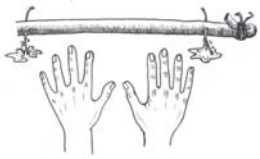
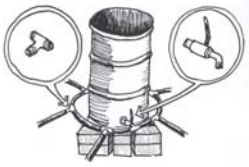


FIGURE 4



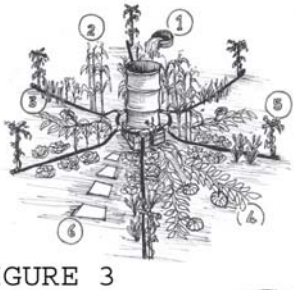


FIGURE 3

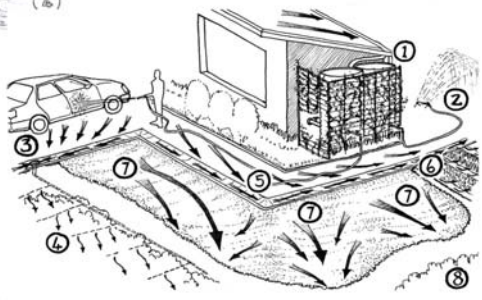


FIGURE 6

FIGURE 5

FIGURE 5

- Trees for shading of workers should be planted at intervals of approximately twenty meters on the periphery or close to the farm plots, thus at least one tree per plot. These trees could be fruit-bearing trees such as Olives or Oranges. However care must be taken to ensure that the trees do not shade the crops, which will hamper their growth and result in a lower yield.
- Permanent seating areas and structures could be provided under the trees to increase the usability of these spaces.
- Secure, vandal proof, lockable sheds should also be provided for each plot, for storage of tools and equipment.

1.7 POLICING OF PUBLIC USE AREAS

In order for public open space to be viable and useful to the communities that they intend to serve, it is of paramount importance that these spaces are made save. Even the most attractive and well cared for park will eventually fall into disrepair, if criminal or unsavoury elements are not kept out of them. Often parks that are otherwise appealing and functional, are not used by the public as they are perceived as unsafe, which eventually leads to them falling into disrepair. It is therefore crucial that the public open spaces in the greater PKSDM be made safe for the people that are to use them. The following steps, where appropriate, should be employed:

- Visibility through and into any park is of crucial importance. Thus dense vegetation along the border of any park or public open space should be avoided, especially at entrance points.
- Tree species that have canopies that are well clear of the ground should be selected. Low, dense, multi-stemmed species should be avoided or pruned, and should not be used with clumps of smaller shrubs, as these pockets of vegetation may afford ill doers hiding places.
- It is important that access into especially larger parks or open areas occur only at certain entry points specifically created for that purpose. However the method of enclosure selected should be as opaque as possible, to allow ample visual penetration.
- Access to large nature areas or conservation nodes, should be controlled and monitored by security personnel. Several successful examples of this method of public open space security are found in larger cities such as Pretoria, where security guards keep a logbook of people entering and exiting public hiking trails or conservation areas. If all people are not accounted for by closing time, they know to inform the police or at least search for the missing person/s. This method of public open space policing also has the benefit of job creation and the wages of the guards and any required infrastructure such as guard huts etc. can be partially subsidised by local interest groups, or homeowners associations in the area.
- The municipality must investigate the potential of establishing a park police corps that are responsible for patrolling public open space areas and relaying all necessary information to

the police. This unit can also work in collaboration with neighbourhood watch organisations, to ensure a more effective and integrated approach to safeguarding public open spaces.

1.8 STREAM REHABILITATION AND CHANNEL IMPROVEMENTS

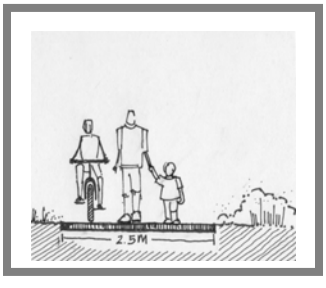
The study area is characterised by a great abundance of streams and waterways, which contribute greatly to its scenic quality and appeal. However unfortunately rivers and streams are often some of the most infested habitats and are clogged with alien vegetation and littered with debris and household rubbish. It is very important that these habitats be protected and rehabilitated wherever possible as they form a vital part of any open space or ecological framework.

Generally river courses and riparian habitat in conservation and remaining natural or rural areas are in a more pristine condition than water bodies within urban and settled areas. Here invader species such as *Melia azedarach, Arundo donnax, Lantana camara*, *Eucalyptus* species and exotic *Acacia* species have often along many river courses. Heavy littering also usually occurs along and in streams in the vicinity of residential and urbanised areas. Unlicensed (and therefore illegal) farm dams in larger rivers are a common occurrence and have serious detrimental environmental consequences.

The National Environmental Management Act (NEMA), the National Water Act and the Biodiversity Bill require the responsible management of ecological and biophysical resources of the country. Urban ecological areas are also of concern in the acts and must be managed in a responsible manner. It is therefore essential that stream, wetland and ground water management and rehabilitation programmes be established.

1.9 HIKING AND BICYCLING TRAILS

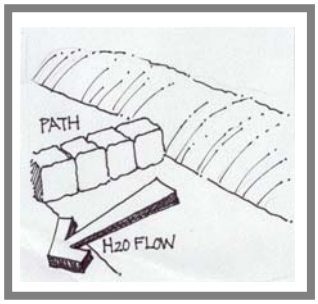
Apart from passive recreation and sports, many of the open spaces within PKSDM itself require well-established hiking and biking trails running throughout towns. These activities should be facilitated by providing paved walkways that connect the various green / open spaces throughout the city, in order for users to be able to commute on foot from one such area to the next with ease. In this fashion a series of interlinking “meanders” can be created, which will greatly improve the potential for these places to be experienced as being integral to a town and not merely a random collection of isolated spaces that do not form a part of the larger planned structure. The following guidelines should be followed wherever



walkways and cycle routes are established:

- Sightlines – ensure that paths have good longitudinal visibility, avoiding sharp bends.
- Margins – paths should have open space to both sides. Where the vegetation comes up to the path it should be opened to allow visibility through it. Where feasible open verges are also recommended for habitat creation and visual variation.

- Lighting – adequate lighting is appropriate in some areas, especially where there is high activity after hours. Lamp poles should be of a human scale but high enough that the light fittings are out of reach of ill doers, thus approximately 4.5 meters high. In order for the various pedestrian/ cycle routes or meanders to be visually recognisable, it is suggested that slightly different lamp-poles, litterbins and other street furniture be used along each route. This will heighten the degree of visual variation within the city and help to create visually recognisable routes.
- Path widths – they should be wide enough or have passing places so that people can pass comfortably, 2 to 2.5 metres.
- Thinning – Where space is sufficient, differentially thin treed areas can be created, and provided with seated rest areas and possibly tables for picnicking. However these spaces must have low stem densities and good visibility to the pathway to ensure safety.
- Undergrowth – shrubs and tall herbaceous vegetation are viewed with great suspicion by many townspeople. Mown verges and low vegetation is preferred close to activity areas. Keep areas specifically designed for wildlife away from high activity areas.
- Concentrate uses – active areas are safe areas. Group activities of similar nature and provide short distances from access roads to these activities.
- Patrol the area – neighbourhood watches on foot, or better yet, on bicycles, mounted police, or environmental wardens provide a presence that deter vagrants and that ensure surveillance and monitoring. Also areas where vagrants tend to congregate must be mowed continuously and planted with tall trees only, to ensure clean views and sight lines into these sites.



- Slope – to accommodate elderly people, wheelchairs and small children on bicycles, the pathways should not be steeper than 5%.
- Drainage – Drainage is of the utmost importance in all trail and walkway construction. Dispose of water to the side of the walkway without causing erosion. Where required construct water diversion bars into the longitudinal section of the walkway.

- Surface material – all surface material must be of a rough texture to prevent slippage. High traffic areas must have a durable paving material, such as interlocking blocks, rough finished concrete, or broken brick paving.
- Informal crossings of the stream should not be removed, but should be made safe for crossing. An elementary steel or timber bridge could be installed that is made of flat timber poles covered with chicken wire to prevent people from slipping. Handrails must be provided at all stream crossings. This type of construction must be low in the stream bed as to not be an obstruction during flooding conditions. The flood will pass over the bridge.
- Handrails – in areas where the walkways may be treacherous a single handrail should be installed. The handrail must be approximately 900 mm high.

- Interpretative signage – Where ecological features are located, or where bird nesting sights or indigenous trees are growing, informative signage could be installed. The signage must be weather proof, vandal proof, durable and display information in an easily understood manner. It is especially important that signage such as this should be introduced within town areas, in order for its residents and visitors to realise that nature is not confined to areas outside of the city and that by conserving and highlighting these areas within cities, their appeal is greatly enhanced.
- Resting areas – provide resting areas along the pedestrian meanders at intervals of approximately 200 metres, or closer if affordable. The seating could be in the form of benches or seating walls. Along pedestrian routes within urban conservation areas or larger parks, large rocks that fit into the environment more readily should be considered. Rocks are also less easily vandalised. Provide trash receptacles and a light post at the seating or resting areas.
- Links – provide links with public transportation routes, and public facilities such as clinics, commercial centres, sports centres, and institutions such as schools.
- Vehicle access – prevent vehicle access into resting areas along the meanders in all cases. In most cities and densely populated areas, pedestrians are being ostracised by city planning that is almost exclusively planned to accommodate vehicular traffic. This results in pedestrians feeling unsafe, especially along very busy roads, where sidewalks are often included as an afterthought, or are completely insufficient to accommodate the amount of pedestrian traffic that it must. It is thus vitally important that vehicles area kept out of public areas that are intended for pedestrian use.

Within the townships the guidelines mentioned above are also especially significant as a large percentage of the population commute by foot or cycle. Especially women, children and older people use such routes increasingly as the townships expand. Under the current conditions of unpaved surfaces, lack of shading,

vast open areas, and illegal dumping, these users are most likely to feel uncomfortable in most of the areas. Thus it is of the utmost importance to design the facilities to alleviate the anxieties of users and to provide a safe environment for all user groups.

1.10 STREET FURNITURE DESIGN

Street furniture and small projects must be constructed and completed by the people of PKSDM and especially the townships and rural settlements. Significant skills are available within the townships to ensure that most of the project could successfully be completed by the residents. The project manager and the project Co-ordinator can identify the persons to be employed as SMME contractors to be trained for the execution of specific projects.

2 SPECIFIC PROJECT PROPOSALS: MEDIUM TO LARGE-SCALE INTERVENTIONS

In this section written and sketch plan descriptions are presented for several concept developments as examples of possible improvements to existing open spaces within the townships within the PKSDM. It is important to note that these conceptual improvement plans are intended as guidelines only, based on past experiences and the wishes of community members interviewed during other similar projects. Detailed plans and designs have to be created for each individual project, based on its specific requirements and for the circumstances within which it occurs.

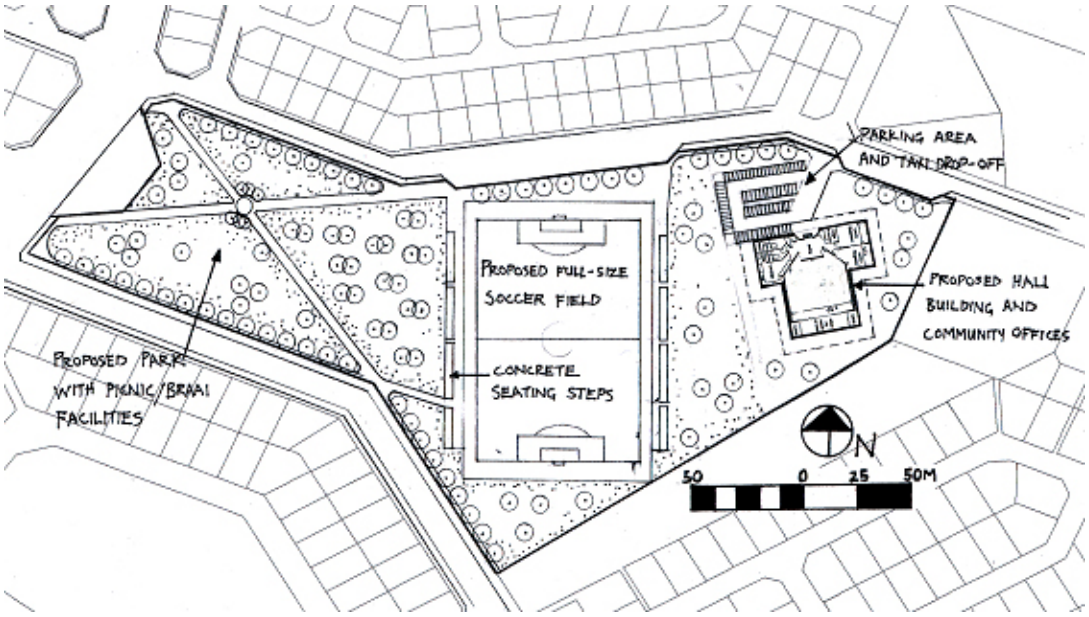
2.1 PILOT PROJECT #1: PROVISION OF MULTI-FUNCTIONAL HALL AND BUILDINGS AND UPGRADE OF EXISTING SPORT FACILITIES

During the field survey it was established that there are many open spaces within the townships that currently have a rudimentary soccer field consisting only of two goal posts and a level playing-surface, with no other facilities or amenities that will stimulate more intensive use of the spaces within which they are situated. In especially larger lots of approximately 2 to 3 hectares, this is not effective use of land yet such spaces are not uncommon. Subsequently the following upgrades are suggested for relatively large open spaces that have little else than a basic soccer field to offer users. A similar layout can also be adapted for parks planned as part of the open space network of new extensions or suburbs of PKSDM, in which case the soccer field should be substituted for a rugby field or tennis and netball courts:

- Provision of the following buildings should be considered for such spaces:
    - Recreational centre and community hall, probably as one multi-functional and multi-spaced building, with community offices and electricity vending facilities. This should be situated opposite the soccer field and other sport facilities with enough distance between them that both facilities can be utilised simultaneously without disturbing each other, yet close enough that during larger sports events use can also be made of the building:
    - Provision of a separate clinic and crèche building can also be considered in such spaces.
- Provision of the following support infrastructure for this building complex:
    - Parking with trees for about 10 to 15 vehicles and safe access to the parking areas situated close to the complex so that possible deliveries can be made. Overflow parking must also be provided for spectators at the soccer field,
    - A taxi stop with a shelter and adequate lighting so that spectators have access to public transport,
    - Adequate pedestrian circulation provision to and around the complex,

- Additionally vending facilities may be provided near the taxi stop, or alternatively they may be located in the adjacent park area mentioned below.

- Upgrade the soccer field by providing a decent playing surface and nets, flood lighting around it, seating structures or well-tended lawn viewing areas and pedestrian circulation to these areas. Trees can also be placed intermittently between the seating structures for shade.
- Where irrigation water is available provision of a park area adjacent to the soccer field, consisting of paved pedestrian circulation routes, high-branching trees, a small lawn area and several benches. A market area can also be considered as part of the park area.



2.2 PILOT PROJECT #2: UPGRADE OF MAJOR COMMERCIAL CORRIDOR

Public spaces become more frequently used if they are associated with other attractions such as commercial corridors or shopping complexes. Furthermore especially in communities where pedestrian commuting is predominant, such as the townships and rural settlements, streets become significant open spaces in themselves. Taxi stops become social gathering places, parking lots may serve as vending areas or playing fields, and sidewalks may become impromptu performance areas. Thus it is important that these linear spaces be viewed as part of the open space framework of a city and upgraded as and when required:

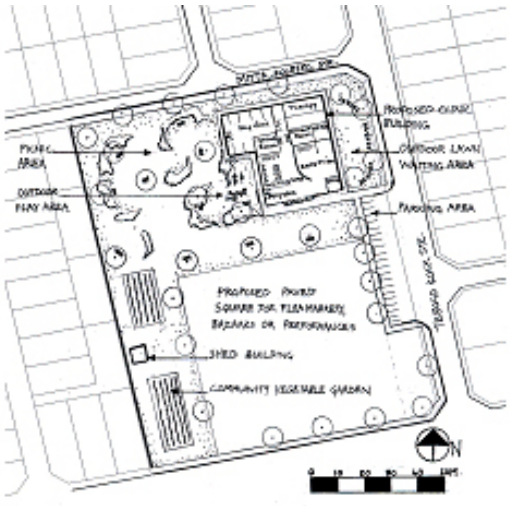
- Creation of speed bumps or other traffic calming devices along the entire length of the commercial corridor,
- Upgrade of existing taxi stop inlets by providing a shelter structure, seating, street lights and litterbins,

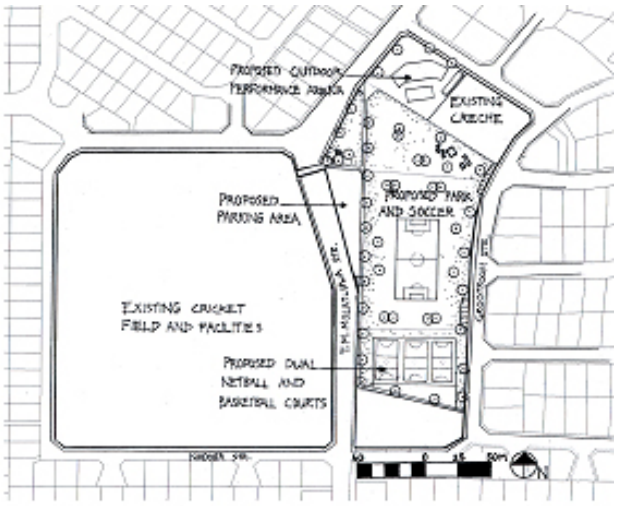
- Provision of at least one more fully facilitated taxi/bus stops on both sides of the main road, in front of the shop buildings, and a raised pedestrian crossing from one side to the other,
- Provision of paved parking with trees, safe entry/exit points, lighting, and a pedestrian walkway on both sides of the road.
- Storm water management system for the entire parking area through a channel and/or pipe system, to a suited of-site location, where infiltration trenches are to be constructed.

2.3 PILOT PROJECT #3: UPGRADE AND EXPANSION OF EXISTING COMMUNITY SERVICE BUILDING GROUNDS

- Provision of paved/tar parking space serving both the clinic and recreation hall. Physical barriers, e.g. a low fence, should be erected between the waiting/play area (see below) and parking area to prevent accidents.
- Outdoor waiting and play area for the clinic on one section of the property, in front of the clinic entrance. This should include seating structures, tables, litterbins, trees and lawn. Paved pedestrian areas should also be provided around the entire building, serving the entrances on both sides.
- Pedestrian access linking the clinic/recreation centre with the street.

- The remainder portion of the property aside of the clinic/hall building should also be planted with trees and lawn.
- A focal feature, in the form of a sculptural name structure or signage device should be erected on the corner in front of the property. This structure and associated landscaping must integrate with the existing paved walkway and should not hinder pedestrian circulation.





2.4 PILOT PROJECT #4: STREET UPGRADES

- Upgrade of existing road surfacing by providing a tarred surface. Adequate streetlights and signage should also be provided.
- Provision of a paved pedestrian walkway alongside, with clear distinction between it and the vehicular entrance.
- Paved parking in front of any existing shop building located along the street.
- Provision of concrete drainage channels alongside the streets to manage rainwater. These channels should join the drainage swale in adjacent parks where possible or lead to infiltration trenches created in suitable locations.
- Stabilisation of sidewalks, through planting, paving or combinations of both.
- Planting of additional trees, and provision of lights in these areas. Robust seating structures should also be provided under the trees.

3 XERISCAPING

A successful open space system is dependant both on sound planning and appropriate design and maintenance principles. In this respect landscaping choices are an important part of any city's greening programme. By making good planting choices and using appropriate management and maintenance principles, time and money are saved and the beautiful natural environment of PKSDM is protected.

The PKSDM region consists of several soil and climate combinations which mean that landscape decisions should be specific to each site. Each area has different soil types with different planting requirements. The native and adaptive plants (adaptive plants are non-native plants that thrive in this climate) that will thrive on these soils are also very different. Before planting, test the soil type and choose the landscape to fit. Each improvement area should be evaluated for the dominant soil type, and in this respect it should be considered obtaining a soil analysis from a specialist.

Where public use areas, especially parks and rehabilitated natural areas are designed and implemented, it is important to consider site-specific conditions related to soil and climate. Planting zones should be created in the landscape according to the various existing or improved soil conditions found over the site. Plants that have similar soil and water needs should be grouped together. For instance sites along moderately sloping areas, are likely to have shallower and possibly poorer soils than sites situated near streams or lower-lying areas.

Considering the prevailing climatic conditions in the PKSDM area, which can be especially dry during the winter, it is important to create public spaces that do not require much water to remain attractive and appealing to users. Often public parks fail to attract people simply because they do not look attractive and inviting. Plant species that require significantly more water than that which is provided by rain will not grow well, unless they are frequently watered. When this does not happen (due to financial and ecological considerations) the park will eventually appear neglected and unattractive and will eventually become disused. Therefore it is important to keep high water use plants to a minimum and group these together to make miniature “oasis” areas.

It is also beneficial to be aware of different microclimates that exist even on a single site. For example, reflected heat from walls or patios can create pockets of warmer temperatures for more tender plants, while plants exposed to cold winds need to tolerate colder winter temperatures. Native and adaptive plants thrive the best to the conditions found locally, and are low maintenance. Low maintenance alternatives to traditional landscaping are becoming the norm. In the PKSDM area, with its hot, mostly dry summers and predominantly dry winters, native and adaptive plants require very little water to thrive.

In the 1980's, the word Xeriscape was coined from the Greek word "xeros" for dry. Xeriscape is defined as "quality landscaping that conserves water and protects the environment." It is not a style of gardening, but a method of gardening. It is based on the following seven principles:

Developing a plan is the first and most important step in a successful low water, low maintenance park or urban green space. Consider the regional and microclimatic conditions of the site; existing vegetation and topographical conditions; how you intend to use your landscape; and the zoning or grouping of plants by their water needs.

The Xeriscape landscape takes into account the regional and microclimatic conditions of the site, existing vegetation and topographical conditions, the intended use and desires of the owner, and the zoning of plant materials according to their water needs. The landscape plan should allow the landscaping to be phased in, with initial phase installation and a future phasing-plan as part of the process. For instance where funds to fully implement a design for a park are not immediately available, trees, seating, braai structures and lighting should initially be installed. This will immediately create a space that is useable and appealing. Other elements such as play structures, paving areas and shrubs or lawn can be added as funds become available and a sufficient tree canopy has been established. Furthermore if trees are allowed to mature somewhat they can protect smaller, frost tender plants from frost when they are eventually planted.

3.1 PRINCIPLES OF PROPER SITE PLANNING

- Design of floor plans and foundations of public use buildings and structures should reflect the site topography.
- Split level plans, terracing, and decks can help integrate built features into site conditions and minimize the cost and effects of grading.
- Building orientation on an east-west axis with glass area minimized on walls with maximum solar exposure will decrease energy demands for cooling, particularly when combined with proper placement of shade producing plants.

Preserve and Protect as Much Existing Vegetation as Possible

- Incorporate existing trees when locating structures and power lines, allowing room for them to grow if they are not at mature size. If retained where possible, trees help to establish a strongly recognisable character for the city. Furthermore by retaining larger trees, a landscape can immediately attain a well-established look, which is not financially feasible if all the existing

vegetation on site is removed and replaced with new plants. According to several surveys conducted, retaining large trees can increase the value of a property by up to 15 %.

- Protect trees from damage during construction with clearly visible fencing located below the outermost branches (see Figures 1 & 2) and flags in overhanging branches. See illustrations for where to locate fences. Much of the damage that occurs to trees during the construction process is due to soil compaction from heavy equipment and materials being driven or stored under trees.
- Roots, which extend out far beyond the trunk are damaged when soil becomes compacted. This will cause trees to go into a gradual decline, and eventually die.
- Filling or cutting in tree root areas will also kill trees. Use tree wells or decks to work around tree trunks, roots and slopes.

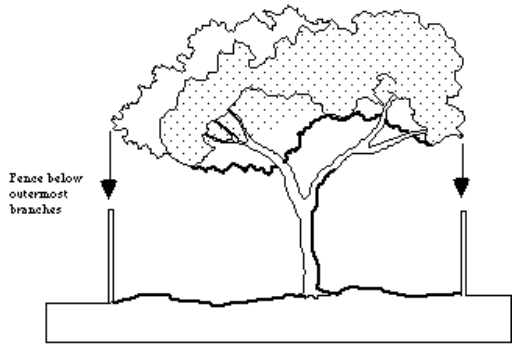


Figure #1 Tree Protection Fencing

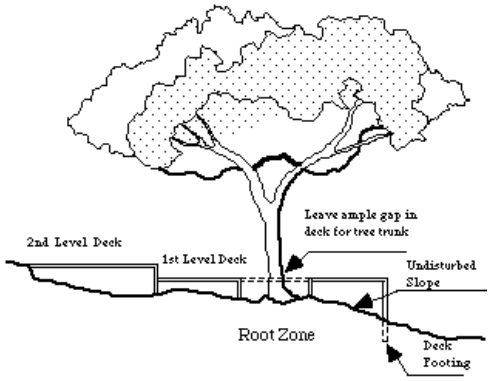


Figure #3 Terraced Deck on Slope with Tree

- Avoid trenching in tree root zones; try tunnelling instead to locate buried utility lines.
- If areas around trees must be paved, use pervious materials or, at a minimum, leave large holes spaced at regular intervals in the tree's root zone (openings will help give trees needed air and water). Never dump paints or solvents near trees. These cause plant death and soil contamination. Dispose of all waste materials properly.

Preserve and Protect Topsoil on Construction Sites

- Topsoil is a valuable resource, which can only be replaced with expensive hauling from other sites, or with many years of the natural process of soil formation. In areas where topsoil must be stripped, collect and stockpile the topsoil for future use on the site.
- Place erosion control devices such as hay bales or erosion control fencing in all areas where construction disturbs the soil. (Such devices will help prevent the loss of topsoil during rainfall, when soil can be washed downstream causing site losses and non-point-source pollution.

Stabilize or Cover all Bare Soil Areas by the Time Construction is Completed

- Extreme slopes, hillsides, and stream banks can be stabilized with vegetation, terracing, dry stack limestone, rubble, or rip-rap.
- In landscaped areas, a thick layer of organic mulch should be applied to planting beds.
- Planted slopes can be covered with erosion control fabrics or jute netting before groundcover or other plantings are added. This will help hold soil in place during the plant establishment period. Shredded mulch, which tends to form a mat should be used in sloping areas, as it tends to wash out less than other types.

Landscaping for Energy Conservation Should be an Integral Part of any Landscape Design

- Plant deciduous trees on the west and northwest sides of structures. Such trees can create enough shade to lower roof and wall temperatures of buildings by up to 10 degrees. This factor can be effectively utilised in public open spaces that have function halls, recreation centres or institutional buildings.
- Deciduous trees that lose their leaves in winter will create summer shade and allow sunlight through open branches to warm and light the home during winter. Even when bare, there can still be significant shading from the branches of large trees.
- Shade can also be created by using a combination of landscape features, such as shrubs and vines on arbours or trellises.
- Shade the outdoor compressor unit of an air conditioning system. This can help save up to 10% on summer cooling bills. Be sure to leave room (at least 1 metre) for airflow and service access.
- Natural cooling without air conditioning can be enhanced, by locating trees and shrubs to channel summer breezes. Cooling breezes will be able to pass through the trunks of trees placed for shading. For this technique to be effective it is crucial to establish the prevailing wind directions for that space. This factor can be utilised to control the climate of buildings located in public open spaces, but can also ameliorate temperatures within the spaces themselves. By situating rest areas so that breezes are channelled through them they can provide respite from hot summer conditions. If deciduous trees are used, these spaces can still be pleasantly warm in winter, as sunlight will reach them for most of the day.
- Living windbreaks can be created to block cold winter winds. By placing dense strips of vegetation perpendicular to prevailing wind directions during winter and locating recreation spaces downwind of these windbreak, they can provide recreation areas in the winter, provided that they receive enough sunlight.
- Public buildings can also be screened from cold winds during winter. Plant evergreen shrubs and/or trees on the north and northwest sides of a building. Varieties that branch all the way to the ground are most effective. Several staggered rows of plantings should be located on the

leeward side of the wind. For best wind protection, plant windbreak trees a distance from the building equal to 5 to 7 times the height the trees will be when mature.

3.2 SOIL ANALYSIS

- Soils will vary from site to site and even within a given site. Be aware of the acid/alkaline state of soils on site and what nutrients are lacking, a condition which can generally be expected throughout most of PKSDM. Soils should be analysed to help determine suitable plants and the need for any soil amendments.
- Add organic matter to planting soil to enhance plant health. This improves soil texture and moisture retention. (Soil rich in organic matter provides nutrients and micro-organisms beneficial to plants.) For planting beds, spread 5 mm of organic matter and mix it in 150mm deep. For soil to fill a hole for planting shrubs or trees, mix 1/3 organic matter into the soil. (Some native plants may not require this, as they are well adapted to poor soils.) Compost and composted sludge products such are excellent sources of nutrients for ornamental landscapes. Such products release nutrients slowly to the plants, making frequent fertilizing unnecessary and minimizing the risk of fertilizer washing out of sites and becoming non-point source pollution.
- Add other amendments as necessary. A soil test is an important first step in determining whether fertilizer is needed, and if so, what type.
- To reduce the need for fertilizer on established turf, use the "Don't Bag It" program: leave clippings in place to decompose after mowing. This recycles important nutrients back into the soil.
- The addition of gypsum and sand can improve the workability and drainage capacity of soil. Soils with large amounts of clay and stones are difficult to work with. If little soil is available and bedrock is in evidence on the site, planting holes are sometimes dug in solid rock. If this occurs, be sure all planting holes drain thoroughly before planting. Standing water on plant roots can be lethal.
- Choose topsoil wisely. If topsoil is imported from off-site, be sure it is of high quality. (There are many grades of topsoil, and the end use will determine what type of topsoil to use. For example, the best material for grading and filling may not be good for planting.)
- The locally occurring soils are suitable for many native plantings. (Native plants are naturally adapted to such soils, and may not thrive on soil blends, which don't mimic the natural conditions.)

3.3 APPROPRIATE PLANT SELECTION

The design will determine the overall effect of the landscape. The actual selection of plants should come from those species that are native or adaptive to the site. Deviation from the appropriate selections creates the need for more soil amendments, more maintenance, and different watering schedules. In any public open spaces for which funds to maintain are usually limited, choices have to be made that ensure maintenance is kept to the minimum. A significant part of the success of low-maintenance gardens is choosing the correct species for the situation and location.

Select Plants that Require a Minimal Amount of Supplemental Watering

- Use plants that will need no supplemental watering after an establishment period, unless there is an extreme drought. The establishment period after installation may require from 18 to 24 months.
- Almost any plant can be used if grouped according to its water needs. Annual and exotic plantings can be located in small, easily accessible areas to make maintenance easier. Irrigation can then be zoned according to plant water needs to make efficient irrigation possible.
- Many native plants are well adapted to the natural soil and rainfall conditions of the area. They have protection mechanisms that cause them to go dormant during periods of stress. They may appear brown, but will turn green again when temperatures improve and it rains.

Choose a Diversity of Plant Species

- Avoid planting large numbers of only one plant species, which can create a monoculture susceptible to pest or insect problems. (A variety of plant species occurs in nature, making more stable and diverse plant populations.)
- The abundance of local – or endemic plants - trees, shrubs, perennials, groundcovers, vines and grasses make it possible to choose plantings which give colour and interest (flowers, fruits, berries, and foliage) year-round.

Buy from Reputable Suppliers and Nurseries

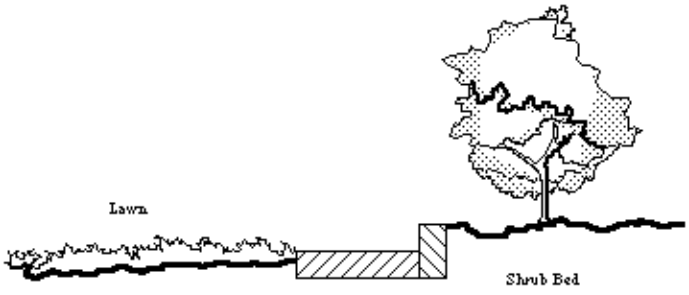
- Well-established plant suppliers know the exact sources of their plant materials. Information on where plants are nursery-grown or field-dug should be available.
- For field collected specimens, environmentally sound collection techniques should be used and permission of the landowner obtained. Rare plants should never be collected from the wild.
- Where locally indigenous species have to be removed from a site due to construction, an attempt should be made to re-locate these specimens to another suitable location on site. If handled and stored properly, these plants should re-establish relatively quickly and without excessive care and maintenance.

Use Locally Grown or Sourced Plants if Possible

- Using plants that have been grown by nurseries within the PKSDM cuts down on transportation costs and increases the viability of plant materials.
- By encouraging the local nurseries to adopt a consumer awareness program, which labels plants "Locally Grown" with a special tag, the local economy may benefit significantly. If trade agreements are established between the municipality and local nurseries, especially ones owned by previously disadvantaged individuals, the landscaping industry could play a significant role in economic development in the area.
- A list of plants suitable to the PKSDM climatic region should be compiled and made available at Local Municipal Offices, participating nurseries and other selected institutions.
- It is furthermore suggested that a list of preferred plant species for all open spaces, which form part of private residential estates, resorts and other developments, be compiled and kept at the Municipal Offices. Such a list will not be enforceable save for instances where specifications of a project-specific EMP, conducted as part of the EIA process, require the use of selected indigenous species. However by establishing awareness programs that seek to educate developers on the benefits of using locally indigenous plants, it is possible to retain and enhance the indigenous character of PKSDM. By possibly coupling such programs with a nominal incentive program for the use of preferred tree species, the effectiveness of the program can be significantly increased.

3.4 PRACTICAL LAWN AREAS

Practical lawn areas mean lawn areas, which have sizes suited to the intended uses. Lawn grass usually covers more of the landscape than is needed for entertaining or recreation. Huge lawns of exotic grasses will require more maintenance and care than any other type of landscape plant and excessive amounts of water. Lawns may be needed as children's play areas, for pets, sports, or simply for the aesthetic appeal of turf, which some people prefer. For more interesting and manageable landscapes, use lawn only as a fill-in plant. Increase the area of decks, porous paving, paths, indigenous grass areas and mulched planting beds to reduce lawn. Be sure to select drought-tolerant grass varieties such as *Cynodon* sp., in the sunny lawn areas.



Design Lawn Areas Appropriate to their Function

- The maintenance needs of lawn can be minimized by the design of the area, the irrigation equipment used, and the turf type selected.
- Design turf areas in rounded, compact shapes to water and mow more efficiently.
- Curving borders of plant beds around turf areas and the use of mowing strips can make mowing and edging easier.
- Avoid long narrow areas of turf, which are difficult to water efficiently.
- Locate turf areas close to associated structures and public buildings such as libraries, clinics, multi-purpose centres, entertainment venues and performance stages, and lower-maintenance areas near the edges or rear of the open space.
- Design turf areas so they can be watered separately from other landscape plants.
- If using an automatic irrigation system, the grass areas can be zoned in order to be watered according to the needs of the grass type.
- For non-automatic systems, use hose-end efficient sprinklers for grass areas and soaker hoses for beds. Watering times will vary by plant type.

Avoid Planting Grass on Slopes

- Sloping areas are difficult to mow and difficult to water without runoff.
- Terracing of slopes can help slow down water. Plant groundcovers, shrubs, and perennials to minimize the maintenance problems of slopes. Alternatively planted retaining walls can be created.
- Many slopes can be left in their natural state. This is especially true in public areas that are adjacent to or within natural areas. Alternatively sloped areas, which usually are not high-use areas, can be rehabilitated to the expected natural condition if they occur on transformed sites. This will both decrease maintenance costs and increase the ecological value of the site, as well as its aesthetic appeal.

Minimize Grass Areas by Using Alternatives

- There are many alternatives to grass lawn areas, which are aesthetically pleasing and low-maintenance.
- Planting beds are a logical alternative to grass if the appealing green and “soft” appearance of plants is still desired.
- Wild flowers can be incorporated into native groundcovers and grasses.
- Mulch beds of bark, stone or gravel can be used as pathways, or around driveways and utility areas. Currently some landscape designers are creating highly aesthetic landscapes for private developments such as shopping complexes and office parks, by replacing excessive areas of

lawn with beds of rocks and gravel, interspersed with indigenous flowering bulbs and shrubs, attractive tree species and accent plants such as Aloes. Such landscapes require far less water than conventional lawn areas and are an attractive alternative to utilise in areas that are not frequently used.

- Children's play areas can be covered with sand or bark mulch to create inexpensive "safety" zones. Paving products made of recycled tires are available to create a ground surface that minimizes injuries.

3.5 EFFICIENT IRRIGATION

Water infrequently, but when you do, water deeply. Plants and grasses develop deeper, drought-tolerant roots when forced to find deeper moisture. Frequent, light watering results in shallow roots, leading to water stress during periods of drought.

Use an Efficient Irrigation System Designed by a Licensed Irrigator

- The type of watering equipment best suited to the situation depends on the landscape, design, layout and budget. The irrigation design should be integrated with the design of the landscape. A simple hose and sprinkler system with a few soaker hoses, or simple sprayer system may be the best way to water landscapes that can be more closely monitored and where theft or vandalism is less likely, such as open areas associated with multi-function halls, libraries, clinics, crèches or small public performance areas. These facilities usually have smaller public spaces associated with them and can be maintained and irrigated by a few persons. Underground drip irrigation and pup-up systems may be more appropriate for larger landscapes such as sports facilities. Larger public parks and landscapes of civic centres. However in such landscapes the design should be such that only frequently used and highly visible or prominent areas require frequent watering.
- It is important to note that a newly installed landscape will require more water during an establishment period of one to two years. After this time, the landscape may require no irrigation except during a drought period.

Install a Water Efficient Automatic Irrigation System, this Includes:

- A timer that allows for scheduling every 5-7 days (14 or 15-day programming) and independent zone programming capability.
- Features such as multi-cycling (or multiple start times) will help in watering areas which may need several short irrigation cycles to avoid runoff.
- An inexpensive rain shut-off device, which will prevent unnecessary irrigation during rain.

- A soil moisture sensor. Unlike the rain shut-off device, the soil moisture sensor actually measures soil moisture, and overrides programmed irrigation when the soil moisture level is adequate.
- Non-mist type low trajectory nozzles and pressure-compensating devices for spray systems in turf areas. Alternatively micro-spray heads should be used for spray systems in turf areas.
- A zoned approach whereby plants of similar water requirements are grouped together in the same zone capable of independent station programming (i.e. turf areas separate from shrub areas, sunny areas separate from shady areas).

Use Low-flow Irrigation Equipment

- Evaporation losses can be minimized by drip irrigation, soaker hoses, or bubblers.
- Drip irrigation systems are ideal for watering plants in beds and garden areas.
- Drip lines require no expensive underground trenching, and are easy to utilize in a retrofit of an existing landscape.
- Drip irrigation uses a flexible hose system, which can be easily modified, to apply water at the ground surface to individual plants. Emitters are punched into the supply line where they are needed. A variety of types and flow rates for emitters are available.
- If water pressure at the source exceeds pre-determined pressure levels, a pressure regulator may be necessary. Filters to remove sediment should be installed at the water source. Flush caps should be installed at the ends of the drip supply lines so that the entire system can occasionally be flushed of contaminants.
- Drip lines should be secured to the soil surface and covered with organic mulch to improve appearance and protect them from sunlight.

Water Only When Plants Need It and Water Deeply

- Deep, more drought tolerant root systems will develop from a weekly deep soaking.
- Irrigate in the coolest part of the day (early mornings and evenings) to avoid evaporation loss and wind drift.
- Night time watering can encourage diseases in plants and during the winter, excess water in the ground may freeze overnight, damaging root systems and killing more tender plants.
- Wet the soil to a depth of fifteen or twenty centimetres, and allow it to dry out between watering events.
- As a general rule, during the growing season most grass needs about 25mm of water per week. This will vary depending on soil type and depth, sun, plant conditions, and rainfall occurrence.
- Watering can taper off gradually as autumn arrives and can gradually increase again in spring.
- Plants don't need as much water in winter, but will still benefit from monthly irrigation if there is no rainfall.

Maintain the System

- Irrigation systems need regular maintenance to ensure proper working order and to adjust irrigation scheduling.
- A complete system audit should be conducted annually, and irrigation schedules adjusted quarterly at a minimum. (A training program for Irrigation Auditors should be offered by the Parks Department of the PKSDM or alternatively by an outside appointed specialist or consultant.)
- Irrigation lines should be flushed and all stations, heads, nozzles, and/or emitters checked for proper functioning.

Staff Should be Trained

- Copy and file a plan with the project file at the Municipality of how the system is built, and instructions for use of the system.
- Post the current irrigation schedule inside the controller box. (Be sure to note that seasonal adjustments to the irrigation schedule will be necessary.)
- Give the operators and maintenance staff an orientation session on how to operate the system. Many irrigation systems that are efficiently designed are never used efficiently because the owner is unaware of the importance of his/her role in scheduling and maintenance after the system is installed.

3.6 USE OF MULCHES

- A 150 to 200 mm layer of organic material should cover all exposed soil areas. Replenish it twice a year. Mulch retains moisture, controls soil temperature, discourages weeds, and prevents erosion.
- Use a deep layer of mulch in planting beds to help retain moisture, slow weed growth, and prevent erosion.
- The use of mulches on sloped areas along with terracing and plantings can help prevent runoff and erosion problems.
- Examples of organic mulch material include: shredded bark, wood chips, pine needles, straw, nut hulls, olive seeds, composted leaves, shredded exotic plants without the seedpods or other reproductive matter.
- The depth of mulch needed will depend on the type used. As a general rule, the coarser the material, the deeper it should be applied. A 150 to 200 mm layer of bark mulch should be sufficient. Mulch needs to be reapplied as it decomposes.
- Use inorganic mulches such as gravel, crushed granite or pebbles in unplanted areas.
- Such areas can become inexpensive pathways, utility areas, or decorative border strips.

- Don't use stone mulches in areas immediately adjacent to buildings, as they can heat up and cause glare.
- Brown or grey coloured stone is preferred over white for use as mulch, as very light colours cause glare. Conversely dark colours or black absorb heat, which may damage less robust plants and groundcovers.
- Use mulches from locally or regionally derived materials. This decreases transportation costs, and utilizes local resources.
- Organic mulches can be the by-product of local tree trimming, land clearing or agricultural activity. Agriculture is a significant industry in parts of the PKSDM, especially to the south, and farmers can sell by-products, which aren't used for other purposes to the municipality or private maintenance contractors. Urban agriculturalists within the townships can also benefit in this fashion.
- Stone mulches can be produced from regional quarries. Mining which is the primary industry in the PKSDM, produces vast quantities of material, which may be suitable for this purpose. Aggregate and crusher run produced by granite mines in the area may also be used for ornamental xeriscaping of public spaces.

3.7 APPROPRIATE MAINTENANCE

Even in the most self-sustaining landscapes maintenance cannot be totally eliminated, especially where people frequently use these places. However by following the first six principles of xeriscaping, it is possible to reduce manpower and cost spent on maintaining public landscapes. After they are established, xeriscapes require less fertilizer, chemicals, and less water than conventional landscaped areas. This is due to a reduction in lawn area and un-adapted plants that might have more diseases and require insect control, more watering and have higher fertilizer demands. However, there is no such thing as a maintenance-free constructed landscape. In general, a properly maintained landscape is hardier and better able to withstand drought, freezing and pest problems. Obviously, landscape maintenance is up to the owner or custodian of that space. However, there are things that can be done during installation to make maintenance easier.

Provide a Composting Area and Encourage Its Use

- Garden waste can be recycled into high-quality compost. This minimizes the load on landfills and encourages wise resource use. Large composting facilities can be operated as a SMME venture and can generate an income for several people. If the garden refuse and clippings (which are not used as mulches) from several parks are taken to a central facility and converted into compost, it

may be possible to cut down on some of the maintenance costs of public parks by producing the compost for the parks from its own garden refuse.

- A well-drained area on the site should be chosen to locate the composting facility – it can be utilized by the entire community for garden and kitchen waste composting. Make sure to clear the area to expose the soil prior to dumping composting materials.
- Smaller compost bins are easy to build and can be effectively utilised in township areas, to improve the quality of soil used for urban agriculture. Remember to use inexpensive materials, allow for air circulation and make the bin wide enough to turn and lift compost. For individual house use by the community, they could use chicken wire, woven wire, or inexpensive fencing to build a bin. Wood stakes, wire, or chain snaps to support and fasten the bin. Discarded wood pallets can be put together with wire to make an inexpensive rectangular bin. A portable bin can be built of wood slats and wire mesh. Cinder blocks or brick can be used if gaps are left to allow air circulation.

Mow Correctly

- Mow the grass when it is about 1/3 higher than the desired height.
- Clippings can be left where they fall, recycling nutrients into the soil.
- If clippings are collected, compost them with raked leaves and organic waste.
- Never mow lawns too short. (Proper mowing heights can help lawns use less water. Grass cut too short is stressed and dries out quickly.)

Fertilize Wisely

- Many native plants do not need fertilizer since they are adapted to natural soil conditions.
- Other plants, such as non-native grasses, need additional nutrients for healthy growth.
- Use recycled lawn clippings, compost, or slow-release encapsulated nitrogen on lawns.

Use Least-toxic Methods of Insect and Disease Control

- Such techniques, otherwise known as Integrated Pest Management (IPM), take advantage of natural methods of control. This protects soil from contamination, inhabitant wildlife from harm, and waterways from being polluted with non-point source pollution.
- Old-fashioned methods such as installing a birdhouse can help encourage natural insect control.
- Chemical controls will destroy beneficial insects as well as harmful ones and should only be considered in instances of serious infestation.
- Organic pest control such as insecticide soaps and manual methods such as pulling weeds or using sand barriers will usually be sufficient and has little or no impact on the environment.
- Beneficial insects such as ladybugs and beetles should be encouraged and can even be introduced into a landscape.

- Over watering and night-time watering may actually cause some diseases such as brown patch on lawns.

HOW TO USE THIS DOCUMENT

The document set is comprised of two separate document types:

The **first is a set of three matrixes** for the Construction, Operation and Maintenance for the various municipal infrastructure types. The main column headings identify the various aspects relating to the construction, operation and maintenance of various types of municipal infrastructure respectively, whilst the impacts appear on the left-hand side of each table. These are grouped into the various categories Air, Earth, Surface Water, Ground Water, and Fauna and Flora, and indicate the types of impacts that the construction, operation and maintenance of infrastructure may have on thee various natural elements. Where a specific activity, or infrastructural component may potentially have a specific environmental impact, this impact is then identified within the matrix with a code. By way of example, as illustrated in the "**Civil Municipal Infrastructure Construction Potential Impacts Relational Matrix**", cooking fires may potentially cause chemical or smoke pollution and this impact is identified in the matrix with the code CAa-4. The code is a reference to the matrix on which it is identified (Construction –C, the category of infrastructure or activity (in this case Construction Camp –A), and the cross reference between the specific activity / item (cooking, fires –a) and the specific (air chemical/smoke pollution -4) – CAa-4.

This code then refers to the impacts in the **second** document set, namely the detailed "**EMP Masters**". There is a specific EMP Master for each of the various categories of environmental impacts, i.e. Air Impacts, Earth Impacts, Surface Water Impacts, Ground Water Impacts, and Fauna and Flora Impacts (with an additional EMP for diverse additional impacts which does not refer to any of the Impact Matrixes).

The "EMP Masters" documents list, in order from left to right:

- The Specific Impacts identified in the matrix. Thus by way of example Smoke/chemical pollution during construction, potentially caused by cooking fires (derived from the Impact Matrix Tables) is listed with the reference code from the Impact Matrix – CAa-4. All impacts are further separated into construction, operation maintenance and overall design parameters.
- Photo/s of the impact where available,
- Potential mitigation measures that may be applicable,
- Photo/s of the mitigation measure/s where available, performance indicators to verify whether the desired results are being achieved,

- Whose responsibility the mitigation measures are,
- And other notes if applicable.
- Additional columns that also appear allow for relevant legislation/standards, and reference to project drawings to be captured, and successful implementation to be checked and signed off.

Many of the activities and components of both the construction and maintenance phases are similar for the different infrastructure categories, therefore the impact matrixes for the construction and maintenance phases are generic and can be applied to any of the different infrastructure categories.

However the different construction and maintenance activities or aspects will be of differing relevance to different infrastructure categories according to the scale and nature of the project. For instance even though both an electrical substation and sewage treatment plant may require a construction camp, the construction camp for a sewage treatment plant will be much more extensive than for the substation. Thus the impact matrix for the construction phase must be interpreted within the context of each specific project.

The same applies to the maintenance impact matrix. No municipal infrastructure project would include all the issues addressed in this guideline document and each project must be evaluated within its specific context and the requirements presented by the brief, or terms of reference.

This system allows each environmental impact to be viewed separately in terms of its potential causes, and then evaluated in terms of a set of proposed mitigation measures. It must however be kept in mind that the success of any mitigation measure is dependant on the quality of the workmanship and the adherence to the EMP as a whole. Often negative environmental impacts arise from sufficient and appropriate designs that are simply not executed well.

- 5 -
CIVIL WORKS – IMPACTS AND MITIGATION MEASURES MATRIX

PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES

CIVIL MUNICIPAL INFRASTRUCTURE CONSTRUCTION POTENTIAL IMPACTS RELATIONAL MATRIX

Date: 2007-12-14	Project No: A1289	Client: PKSDM	Consultant: African EPA

Final

IMPACTS OF CONSTRUCTION (either by direct cause or by significantly promoting thereto)	INFRASTRUCTURE CONSTRUCTION ACTIVITY/ ASPECT																			
	A Construction Camp				B On-Site Storage (Assuming separate storage)						C Excavation eg Trenches, Foundations						D Site Itself			
	a) Cooking, Fires	b) Cleaning, Sanitation, Worker Activity	c) Buildings	d) Access and Vehicles	a) Building Materials	b) Chemicals, Fuels	c) Building Rubble	d) General Refuse	e) Plant and Equipment	f) Access and Vehicles	a) Excavated Material, Topsoil	b) Slopes, Gradient Ratios	c) Backfilling	d) Re-vegetation	e) Borrow Pit/s	f) Access and Vehicles	a) Materials Mixing	b) Refuse/ Rubble Removal	c) Access and Vehicles	d) Levels on site
Air																				
1) Dust Pollution				CAd-1						CBf-1	CCa-1				CCe-1	CCf-1	CDa-1	CDb-1	CDc-1	
2) Noise Pollution		CAb-2		CAd-2						CBf-2						CCf-2	CDa-2		CDc-2	
3) Odours		CAb-3																		
4) Air Chemical/ Smoke Pollution	CAa-4																			
Earth																				
5) Erosion/ Topsoil Loss			CAc-5	CAd-5						CBf-5	CCa-5	CCb-5				CCf-5			CDc-5	CDd-5
6) Significant Sedimentation				CAd-6						CBf-6						CCf-6			CDc-6	
7) Soil Compaction/ Impermeability			CAc-7	CAd-7	CBa-7		CBc-7			CBf-7						CCf-7			CDc-7	
8) Soil Contamination		CAb-8				CBb-8		CBd-8	CBe-8											
9) Slope Collapse												CCb-9								
Surface Water																				
10) Surface Water Physical Pollution (Litter, Refuse, Rubble)		CAb-10					CBc-10	CBd-10										CDb-10		
11) Surface Water Sewage Pollution		CAb-11																		
12) Surface Water Biological Pollution (Pathogens, Organic Solvents)		CAb-12																		
13) Surface Water Chemical Pollution						CBb-13											CDa-13			
14) Drainage Problems				CAd-14						CBf-14			Cc-14			CCf-14			CDc-14	CDd-14
15) Anaerobic Conditions																				
16) Increased Runoff Rate				CAd-16						CBf-16						CCf-16			CDc-16	CDd-16
Ground Water																				
17) Ground Water Biological Pollution																				
18) Ground Water Chemical Pollution						CBb-18														
Fauna and Flora																				
19) Habitat and Vegetation Loss	CAa-19	CBa-19	CAc-19	CAd-19						CBf-19						CCf-19			CDc-19	
20) Habitat Fragmentation				CAd-20						CBf-20						CCf-20			CDc-20	
21) Habitat Degradation/ Disturbance				CAd-21						CBf-21						CCf-21			CDc-21	
22) Poaching		CAb-22																		

PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES

CIVIL MUNICIPAL INFRASTRUCTURE DESIGN AND OPERATIONS POTENTIAL IMPACTS RELATIONAL MATRIX

Date: 2007-12-14	Project No: A1289	Client: PKSDM	Consultant: African EPA

Final

IMPACTS OF INFRASTRUCTURE (either by direct cause or by significantly promoting thereto)	INFRASTRUCTURE DESIGN AND OPERATIONS																						
	A Roads			B Stormwater								C Waste Water			D Potable Water							E Refuse		F Electricity	
	a) Cut/ Fill Slopes	b) Roadside Planting	c) Roadside Edges	a) Inlets	b) Outlets	c) Detention Structures	d) Retention Dams	e) Pollution Control	f) Artificial Wetlands	g) Pipes	h) Channels	a) Waste Water Collection	b) Waste Water Treatment	c) Basic Sanitation Provision	a) Internal Reticulation (Mass Housing)	b) Bulk Water Pump Stations	c) Bulk Water Lines	d) Connec-tions to Rand Water	e) Purification Works	f) Boreholes and Springs	g) Reservoir-Sites	a) Refuse Removal	b) Storage Dumps/ Landfill Sites	a) Substations	b) Powerlines Servitudes
Air																								
1) Dust Pollution		DAb-1	DAc-1																				DEb-1		
2) Noise Pollution																DDb-2			DDe-2				DEb-2	DFa-2	
3) Odours													DCb-3									DEa-3	DEb-3		
4) Air Chemical/ Smoke Pollution																									
Earth																									
5) Erosion/ Topsoil Loss	DAa-5	DAb-5	DAc-5		DBb-5						DBh-5										DDg-5		DEb-5		DFb-5
6) Significant Sedimentation	DAa-6			DBa-6	DBb-6	DBc-6	DBd-6		DBf-6		DBh-6														
7) Soil Compaction/ Impermeability			DAc-7								DBh-7														
8) Soil Contamination												DCa-8	DCb-8	DCc-8								DEa-8	DEb-8		
9) Slope Collapse	DAa-9			DBa-9	DBb-9	DBc-9	DBd-9				DBh-9												DEb-9		
Surface Water																									
10) Surface Water Physical Pollution (Litter, Refuse, Rubble)			DAc-10	DBa-10	DBb-10	DBc-10	DBd-10	DBe-10	DBf-10		DBh-10												DEb-10		
11) Surface Water Sewage Pollution												DCa-11	DCb-11	DCc-11											
12) Surface Water Biological Pollution (Pathogens, Organic Solvents)												DCa-12	DCb-12												
13) Surface Water Chemical Pollution													DCb-13										DEb-13		
14) Drainage Problems			DAc-14	DBa-14	DBb-14	DBc-14	DBd-14		DBf-14	DBg-14	DBh-14														
15) Anaerobic Conditions						DBc-15	DBd-15		DBf-15				DCb-15												
16) Increased Runoff Rate			DAc-16								DBh-16														
Ground Water																									
17) Ground Water Biological Pollution												DCa-16	DCb-16	DCc-16									DEb-17		
18) Ground Water Chemical Pollution													DCb-17										DEb-18		
Fauna and Flora																									
19) Habitat and Vegetation Loss	DAa-19	DAb-19		DBa-19	DBb-19								DCb-19						DDe-19		DDg-19		DEb-19		DFb-19
20) Habitat Fragmentation													DCb-20						DDe-20		DDg-20		DEb-20		DFb-20
21) Habitat Degradation/ Disturbance		DAb-21		DBa-21	DBb-21	DBc-21	DBd-21	DBe-21	DBf-21		DBh-21		DCb-21				DDc-21				DDg-21		DEb-21		DFb-21
22) Poaching																									

PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES

CIVIL MUNICIPAL INFRASTRUCTURE MAINTENANCE POTENTIAL IMPACTS RELATIONAL MATRIX

Date: 2007-12-14	Project No: A1289	Consultant: African EPA	Client: PKSDM

Final

IMPACTS OF MAINTENANCE (either by direct cause or by significantly promoting thereto)	INFRASTRUCTURE MAINTENANCE											
	A Mowing	B Pruning	C Weeding	D Alien Vegetation Clearance	E Re-Planting	F Watering/ Irrigation	G Sediment Removal	H Litter/ Refuse Removal	I Embankment Structural Maintenance	J Road Resurfacing	K Trenching/ Pipe Repairs	L Sewage Spill Cleanup
Air												
1) Dust Pollution	MA-1			MD-1			MG-1			MJ-1		
2) Noise Pollution	MA-2	MB-2		MD-2			MG-2			MJ-2		
3) Odours						MF-3	MG-3			MJ-3		ML-3
4) Air Chemical/ Smoke Pollution				MD-4						MJ-4		
Earth												
5) Erosion/ Topsoil Loss	MA-5			MD-5		MF-5					MK-5	
6) Significant Sedimentation				MD-6						MJ-6	MK-6	
7) Soil Compaction/ Impermeability				MD-7			MG-7			MJ-7	MK-7	
8) Soil Contamination	MA-8			MD-8			MG-8			MJ-8	MK-8	ML-8
9) Slope Collapse									MI-9			
Surface Water												
10) Surface Water Physical Pollution (Litter, Refuse, Rubble)	MA-10	MB-10	MC-10				MG-10	MH-10				
11) Surface Water Sewage Pollution												
12) Surface Water Biological Pollution (Pathogens, Organic Solvents)												
13) Surface Water Chemical Pollution			MC-13	MD-13				MH-13		MJ-13		
14) Drainage Problems						MF-14					MK-14	
15) Anaerbic Conditions							MG-15					ML-15
16) Increased Runoff Rate										MJ-16		
Ground Water												
17) Ground Water Biological Pollution												ML-17
18) Ground Water Chemical Pollution			MC-18	MD-18				MH-18		MJ-18		
Fauna and Flora												
19) Habitat and Vegetation Loss	MA-19	MB-19		MD-19								
20) Habitat Fragmentation												
21) Habitat Degradation/ Disturbance			MC-21	MD-21	ME-21		MG-21		MI-21	MJ-21	MK-21	
22) Poaching							MG-22					

PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES

MUNICIPAL CIVIL INFRASTRUCTURE: AIR IMPACTS - EMP MASTER

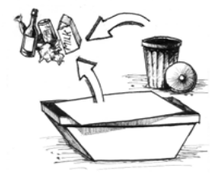
Date: 2007-12-14	Project No: A1289	Consultant: African EPA	Client: PKSDM

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POTENTIAL CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		1 Dust Pollution (Construction)	Access roads to/from/on the site (CAd-1; CBf-1; CCf-1; CDc-1) Excavation of material (CCa-1) Mixing of materials (CDa-1) Refuse / Rubble removal (CDb-1) Borrow pits (CCe-1)	 	Roads: All access roads and other roads on the site are to be wet with water dowsers as and when the need arises. Caution is to be taken by the operator not to wet surfaces excessively. Stockpiling of soil: If the material is to be stockpiled for a period longer than 6 months, the stockpile is to be vegetated. When the soil is being moved from the stockpile, water dowsers are to wet the area where vehicular access occurs. General: Large areas of the site that have been stripped of vegetation are to be avoided. If this cannot be avoided dust suppression is to be undertaken by water dowser. The operator of the water truck is to wear the correct PPE.	 	Successful dust suppression I.e. limited dust in the air. Planting in the vicinity of the construction activities is not covered in dust. No run-off from the dust suppression activities is evident. Stockpiles are vegetated if material is to be stockpiled for longer than 6 months. No dust pollution from stockpiled soil or material. No dust pollution from unavoidable bare or unvegetated areas.	Contractor Contractor Contractor	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
		1 Dust Pollution (Operations)	**Borrow Pits (DCe-1)**		Roads: All access roads and other roads on the site are to be wet with water dowsers as and when the need arises. Caution is to be taken by the operator not to wet surfaces excessively.		Successful dust suppression I.e. limited dust in the air. Planting in the vicinity of the construction activities is not covered in dust. No run-off from the dust suppression activities is evident. Successful revegetation of areas where alien species have been removed.	Operator	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM. Further site specific conditions according to the EMP are to be noted.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POTENTIAL CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
					Stockpiling of soil: If the material is to be stockpiled for a period longer than 6 months, the stockpile is to be vegetated. When the soil is being moved from the stockpile, water dowsers are to wet the area where vehicular access occurs. General: Large areas of the site that have been stripped of vegetation are to be avoided. If this cannot be avoided dust suppression is to be undertaken by water dowser. The operator of the water truck is to wear the correct PPE.		No dust pollution from stockpiled soil or material. No dust pollution from unavoidable bare or unvegetated areas. Planting in the vicinity of the construction activities is not covered in dust. No run-off from the dust suppression activities is evident.	Contractor Contractor		
		1 Dust Pollution (Maintenance)	Mowing (MA-1) Alien Vegetation Clearance (MD-1) Sediment Removal (MG-1) Road Resurfacing (MJ-1)		Roads: Where appropriate, the areas that are being re-surfaced can be wet with water dowsers as and when the need arises. Caution is to be taken by the operator not to wet surfaces excessively. Vegetation clearing: In areas where alien vegetation is to be removed, the area is to be revegetated as quickly as possible with indigenous grass and tree species (which ever is most appropriate). General: Large areas where vegetation has been removed or has died are to be identified and revegetated with indigenous trees and grasses (as appropriate).		Successful dust suppression I.e. limited dust in the air. Planting in the vicinity of the construction activities is not covered in dust. No run-off from the dust suppression activities is evident. Successful revegetation of areas where alien species have been removed. Successful revegetation of areas where alien species have been removed. Successful revegetation of unvegetated areas.	PKSDM personnel Contractor/ maintenance personnel Contractor	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
		1 Dust Pollution (Design)	Lack of sufficient roadside planting (DAb-1) Roadside edges (DAc-1) Landfill sites (DEb-1)		Establish the location of the site and accordingly determine the site specific mitigation measures that are to be adhered to in the construction phase. Ensure that the aspect of dust pollution is addressed in the tender documents and state the requirements.		Appropriate mitigation measures in relation to the context. Dust pollution addressed in the tender documents.	Engineers	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POTENTIAL CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
					Sufficient planting of all roadside embankments, medians and sidewalks are to be done to prevent dust pollution. Species with sufficiently strong roots should be used, that provide coverage throughout the year. Preferably indigenous species should be used.		No dust pollution from roadside edges, embankments or medians.	Contractor		
					Where possible unused sections of landfill sites should be re-vegetated with indigenous veld grass species, or alternatively dust suppression by water dowser should be done when appropriate.		Limited dust from landfill sites.	Contractor/ maintenance personnel		
		2 Noise Pollution (Construction)	Worker activity at the construction camp (CAb-2) Heavy vehicles on access roads (CAd-2; CBf-2; CCf-2; CDc-2) Mixing of materials (CDa-2)		Ensure that the contractor adheres to the construction times as stated in the contract documents or EMP (usually 7:00 - 18:00).		Construction hours are in accordance with the EMP. Maintenance logs of the plant and equipment are to be available on request. Suitable location for the Construction Camp.	Contractor	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
					Where applicable all equipment must be SABS approved and use of noise generating equipment shall take place in accordance with the Gauteng Noise Regulations. Silencers must be fitted on al construction machinery. All construction vehicles must have baffled exhaust systems and comply to national noise regulations.		Noise levels are within acceptable limits.	Contractor		
					Ensure that all plant, vehicles and equipment is regularly maintained.		No noise pollution caused due to faulty or poorly maintained equipment or machinery.	Contractor		
					Locate the construction camp in such a position that it does not interfere with residential areas. The contractor is required to adhere to SABS 1200 safety measures during construction. Loud noise and yelling will not be tolerated.		No complaints received about noise from adjacent or affected persons.	Contractor		

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POTENTIAL CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		2 Noise Pollution (Operations)	Bulk water pump stations (DDb-2) Water purification works (DDe-2) Substations (DFa-2)		Ensure that the contractor adheres to the operation times as stated in the contract documents or EMP (usually 7:00 - 18:00). Ensure that all plant and equipment is to be regularly maintained. Where applicable all equipment must be SABS approved and use of noise generating equipment shall take place in accordance with the Gauteng Noise Regulations.		Operation hours are in accordance with the EMP. Maintenance logs of the plant and equipment are to be available on request. No complaints received about noise from adjacent or affected persons. No noise pollution caused due to faulty or poorly maintained equipment or machinery. Noise levels are within acceptable limits.	Operator Contractor Contractor	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
		2 Noise Pollution (Maintenance)	Mowing (MA-2) Pruning (MB-2) Alien vegetation Clearing (MD-2) Sediment removal (MG-2) Road resurfacing (MJ-2)		Ensure that the contractor adheres to the maintenance times as stated in the contract documents or EMP (usually 7:00 - 18:00). Ensure that all plant and equipment is to be regularly maintained. Where applicable all equipment must be SABS approved and use of noise generating equipment shall take place in accordance with the Gauteng Noise Regulations.		Maintenance hours are in accordance with the EMP. Maintenance logs of the plant and equipment are to be available on request. Noise levels are within acceptable limits.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
		2 Noise Pollution (Design)	General location of facilities - bulk water pump stations, purification works, landfill sites, substations (DDb-2; DDe-2; DEb-2; DFa-2)		Establish the location of the site and accordingly determine the site specific mitigation measures that are to be adhered to in the construction phase. Ensure that the aspect of noise pollution is addressed in the tender documents and state the requirements.		Appropriate mitigation measures in relation to the context. Noise pollution addressed in the tender documents.	Engineers	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POTENTIAL CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		3 Odours (Construction)	Cleaning, sanitation, worker activity at construction camp (CAb-3)		Construction Camp: Ensure that the dustbins are cleaned out on a regular basis.		Dustbins are not overflowing with refuse.	Contractor	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
					Ensure that the chemical toilets are sufficient and maintained as stated by the supplier. If a French drain and septic tank system is utilized, ensure that anaerobic conditions do not arise. If pit latrines are used, ensure that the hole is deep enough and situated in a suitable location.		Chemical toilets are clean. No smells emanating from the septic tank and French drains.	Contractor		
		3 Odours (Operations)	Waste Water Treatment (DCb-3) Refuse Removal (DEa-3)		Landfills: Ensure that the refuse that is disposed of on a daily basis at the waste disposal site is covered with a layer of soil daily.		No refuse remaining at the collection point once the operator has collected the material. Verify that the daily arisings are covered with a layer of soil.	Operator	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
					In areas where refuse is removed, the operator is to ensure that all the refuse is collected. Where spillage of refuse has occurred, it is to be collected and disposed of accordingly.			Operator/ maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
		3 Odours (Maintenance)	Irrigation (MF-3) Sediment Removal (MG-3) Road resurfacing (MJ-3) Sewage spill clean - up (ML-3)		Irrigation: Irrigation is to be undertaken in a controlled manner to ensure that no areas of stagnant water are created.		No stagnant water.	Operator/ maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	

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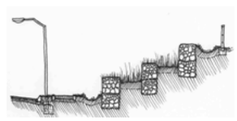
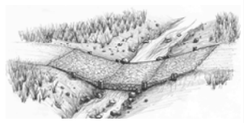
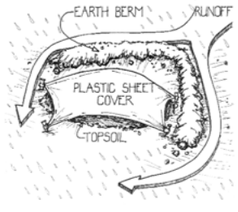
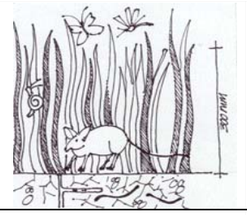
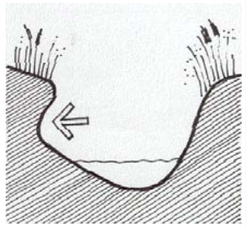
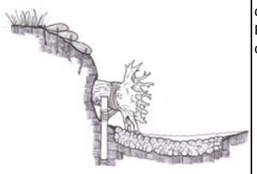
					Sewage clean up: In areas where a sewage spill has taken place, the clean-up procedures are to be undertaken as quickly as possible to minimize the effect of odours.		Prompt response to sewage spill.	Operator/ maintenance personnel		
		3 Odours (Design)	Landfill sites (DEb-3) Waste water treatment works (DCb-3)		General: Establish the location of the site and accordingly determine the site specific mitigation measures that are to be adhered to in the construction phase. Ensure that the aspect of odour is addressed in the tender documents and state the requirements.		Appropriate mitigation measures in relation to the context. Odour is addressed in the tender documents.	Engineers	Precautions are to be undertaken to the satisfaction of the PM, the Environmental Health Division and Environmental Management Division of the PKSDM.	
		4 Air Chemical/ Smoke Pollution (Construction)	Cooking fires (CAa-4)		No cooking fires will be allowed on site other than designated areas within the construction camp.		No sign of cooking fires.	Contractor		
		4 Air Chemical/ Smoke Pollution (Operations)								
		4 Air Chemical/ Smoke Pollution (Maintenance)	Alien vegetation clearing (MD-4) Road Resurfacing (MI-4)		No alien vegetation may be burnt on site. Plant material is to be taken to an appropriately permitted waste disposal site.		No sign of burning of alien vegetation on site.	Contractor		
		4 Air Chemical/ Smoke Pollution (Design)								

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE / EXAMPLE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		5 Erosion/ Topsoil Loss (Construction)	Clearing of the building footprint area (CAc-5) Grading and construction of the access roads (CAd-5; CDf-5; CCf-5; CDc-5) Excavation of trenches, foundations etc (CCa-5) Steep unstabilised slopes (CCb-5) Cut & fill activities/ leveling (CDd-5)		Cut & Fill: Cut slope gradients to net exceed the natural angle of repose for the particular soil type.		Cut and fill operations do not exceed the natural angle of repose of the particular soil. The embankments are sufficiently stabalised so as to prevent erosion.	Contractor		
					In areas that are steep, measures are to be undertaken to limit erosion of the banks such as constructing a retaining wall.	 	Steep roadside embankments do not erode.	Contractor		
					Roads: Gradients of road alignments to be minimal, aligning the road obliquely across contours and not perpendicularly.		The road alignment is not perpendicular to the contours, but as oblique as possible. Drainage channels have been addressed sufficiently so as not to cause erosion.	Contractor		
					Where steep access roads are necessitated due to the general topography of the site, swales alongside the roads and cut-off drains with appropriate sand traps or sedimentation and infiltration areas are to be provided at appropriate intervals.		Steep access roads on site do not erode. Sediment accumulates in the desired locations and is effectively removed.	Contractor		

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE / EXAMPLE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
					Crossing of drainage channels by site access roads and all permaent roads is to include culverts / pipes whith energy dissipation / dispersion mechanisms integral to the design of the crossing. Stormwater: Storm water control during construction to be in terms of a submitted stormwater management plan submitted to PM for approval.Stormwater shall, where possible not be allowed to be concentrate and flow down cut or fill slopes or along pipeline routes without erosion protection measures in place.	 	Temporary drainage channels do not erode or degrade due to vehicles crossing over it. Storm water management plan has been drafted, is approved and being adhered to.	Contractor Contractor		
					Overflow channels shall be lined with stone pitching along the lengther and at the points of discharge. Stormwater channels shall not discharge straight down the contrours but shall be aligned at such an angle to ensure that erosion does not take place. In the discharge area dense natural vegetation is to be planted where appropriate. Furthermore where appropriate all sections of the channel should be vegetated with indigenous, riverine vegeetation. Excavations: Excavate, close, compact and rehabilitate trenches as soon as possible after the pipes have been installed. Avoid any open trenches for any extended period of time. If the excavation should be filled with water, this water is to be pumped from the trench in the appropriate manner and discharged in a responsible manner. Excavations and stored topsoil or other excavated material should be protected from haevy rain and runoff by means of cut-off berms and/ or sheet covering.	 	No erosion of channel or discharge point occurs. Stom water discharges oblique to contours in steep areas and do not erode latterally or overflow. Drainage channels remain vegetated with indigenous vegetation. Stormwater attenuation occurs through vegetation at discharge points. Trenches are not left open for extended periods of time. Trenches are properly back filled, compacted and revegetated. Stockpiled material for the purpose of backfilling trenches is properly protected against erosion from rain and runoff.	Contractor Contractor Contractor		

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE / EXAMPLE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
					General: Erosion caused by severe rain storms must be rehabilitated as soon as possible after the damage has occured. Limit the extent of the vegetation removal on a site. Re-vegetate all exposed surfaces as soon as is practically possible with indigenous grasses, shrubs and trees (which ever is most appropriate). Water usage during construction is to be closely monitored, especially for leaking pipes, taps etc. Where roots can act as erosion protection, tress should be cut as close as possible to the ground level and the rootball retained.		Areas where erosion is taking place are being rehabilitated. No extensive areas of exposed soil. Revegetation is successful. Water usage on site is closely monitored i.e. no leaking pipes etc. Root ball retained where appropriate.	Contractor		
		5 Erosion/ Topsoil Loss (Operations)	Landfill sites (DEb-5) Powerlines servitudes (DFd-5) Reservoir sites (DDg-5)		All exposed areas are to be revegetated as soon as practicably possible. Areas where erosion is evident are to be repaired as soon as erosion problems are evident. All access roads are to be of such a nature that run-off will not cause erosion. Drainage channels are to be constructed in appropriate locations and kept unblocked. A storm water management plan is to be established for the site and approved bu the PKSDM.		Limited areas of exposed soils. Remediation and maintenance of areas affected by erosion. Access roads aligned in such a manner as not to contribute to erosion. Sufficient drains are installed and maintained as necessary.	Operator/ maintenance personnel		
		5 Erosion/ Topsoil loss (Maintenance)	Mowing (MA-5) Alien Vegetation clearing (MD-5) Irrigation (MF-5) Trenching associated with pipe repairs (MK-5)		Mowing: The blades of the mowers are to be set at the appropriate height to ensure that the grass is not cut too short.		No exposed soil resulting from vegetation being mowed too short.	Contractor / maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Alien vegetation clearing: A rehabilitation plan is to be established and approved by the Environmental Planning Section prior to the eradication of the alien vegetation. Extensive areas of exposed soil are to be avoided. The area where the alien vegetation has been removed is to be re-vegetated with the appropriate grass, shrub and tree species as soon as possible.		Approved rehabilitation plan. No estensive areas of exposed soil. Re-vegetation of area that has been cleared.	Contractor / maintenance personnel		

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE / EXAMPLE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
					Where the removal of alien vegetation within stream channels is casuing or may potentially lead to soil erosion, The stumps and root balls of trees and larger shrubs should be left in-situ to act as soil stabilisation and treated for coppicing. Large root balls can also be used as energy dissipaters alongside steeper embankments. Additional soil stabilisation with earth-filled hessian bags containing a mix of indigenous pioneer grass species seeds, securely staked into the earth, can also be used.		Alien vegetation removal is not causing erosion of the stream bank. Retained root balls do not propagate or cause recurrence of alien plants.	Contractor / maintenance personnel		
					Trenches: All trenches are to be backfilled, compacted and re-vegetated as soon as possible after the pipes have been repaired.		No sagging of areas where pipes have been repaired. No evidence of soil erosion where water has been pumped from the trenches.	Contractor / maintenance personnel		
					Topsoil is not to be used for the purposes of backfilling of any trenches or temporary excavations. Only subgrade or other excavated material as approved is to be used for the purpose of backfilling.		Topsoil is not being used for backfilling.	Contractor		
					Trenches that must be left open for extended periods of time, must be protected from surface runoff and rain by cut off berms and/ or sheet covering as approved by the PL. If the trenches should be filled with water, this water is to be pumped from the trench in the appropriate manner and discharged in a responsible manner.		No erosion of trenches or excessive ponding occurs.	Contractor		
					Irrigation points are not to be located in positions where they cause excessive runoff along steep embankments, especially where such slopes are being vegetated and do not yet have sufficient vegetation cover to prevent soil erosion.		Irrigation activities are not causing erosion.	Contractor / maintenance personnel		
		5 Erosion/ Topsoil loss (Design)	Cut/ fill slopes (DAa-5) Roadside planting (DAb-5) Roadside edges (DAc-5) Outlets (DBb-5) Drainage channels (DBh-5) Any structures with large foot-prints		All cut and fill slopes adjacent to roads are to be properly stabilised and where possible vegetated, as soon after construction has been completed as possible. Where steeps slopes are required, plant species with strong root systems which will anchor the soil are to be used.		Speed of run-off is controlled in an appropriate manner so as not to result in erosion downstream of the the inlet / outlet. Appropriate road alignment. Appropriate footprints for the extent of the proposed development. Erosion control is addressed in the tender document.	Engineers	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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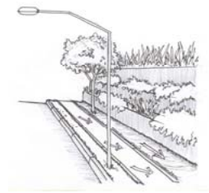
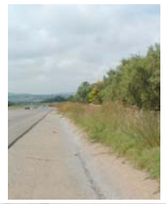
					Where embankments alongside roads have to be steep, measures are to be undertaken to limit erosion of the banks, such as constructing a retaining wall. These structures are to be planted where possible.		Steep embankments do not erode or collapse.	Engineers		
					In instances where the construction of retaining walls are not neccessary, plantable concrete blocks should be used to stabilise slopes. These should be planted with indigenous veld grass species where appropriate or otherwise with indigenous lawn species.		Embankments do not erode.	Engineers		
					Roadside edges are to be so designed that they do not canalise water unneccessarily. Where steeper gradients occur, roadside edges must be designed and constructed so as to prevent erosion. Energy dissipation/ dispersion mechanisms are to be provided at all outflow points or where roadside edges end. Where roads are required along steep slopes, roadside edges must be protected from erosion by means of drainage channels with appropriately designed energy dissipating devices. Outlet points must be protected against erosion by means of energy dissipating structures and proper surface treatment.		Roadside edges do not erode and accumulated sediment is removed effectively.	Engineers		
					Crossing of drainage channels to include culverts/pipes with energy dissipation/dispersion mechanisms integral to the design of the crossing.		Drainage channel crossings cause the minimum possible disturbance to runoff. Erodion is prevented at outlets.	Engineers		
					Roads are to be aligned in such a manner as to avoid crossing the contours at acute angles, the road should cross contours as obliquely as possible.		Road alignment does not unnecessarily cause increased runoff rates. Erosion is avoided.	Engineers		
					The footprint for any proposed development is to be kept to a minimum to limit the extent of exposed soil that could result in erosion.		Minimal erosion of soil due to the extent of the building footprint.	Engineers		
					Erosion control is to be included in the tender documentation.			Contractor		

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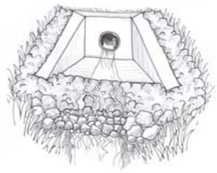
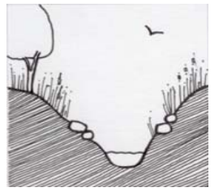
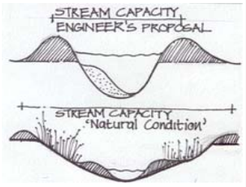
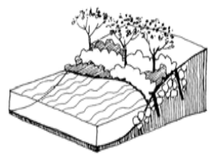
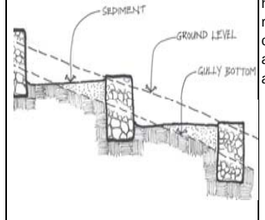
					Ensure that the edges surrounding the stormwater structure are detailed in the appropriate manner to ensure that erosion does not take place e.g. floor, embankments etc.		Erosion does not occur around storm water outlet structures.	Engineers		
					Where feasible stream channels should be re-shaped to have as natural a profile as possible. A shallower profile is less likely to erode and greatly reduces the channeling effect caused by a narrow, deeper profile, decreasing the risk of flooding. The sectional volume of the channel should be culculated by a hydrological engineer.		Shallower stream channel profiles are maintained where possible, reducing runoff rates.	Engineers	Hydrological engineer design to ensure that flooding or erosion of stream channel does not occur.	
					Where stormwater channels are being eroded due to heavy runoff and/ or steep embankments, appropriate mitigation measures such as gabion reinforcing should be installed.		Erosion of storm water channel is halted and successful mitigation occurs.	Engineer / Contractor		
					In areas where stream channels are being eroded due to a loss of vegetation, slope stabilisation and re-vegetation should be done. Soil-filled hessian bags containing a mix of indigenous pioneer grass species seeds, securely staked into the earth, can be used. Where appropriate, riverine tree species should also be planted.		Erosion of storm water channel is halted and successful mitigation occurs.	Contractor		
					In instances where large volumes of water must be accommodated stream channels should, where appropriate, be properly stabilised and protected from erosion by means of plantable concrete unit pavers or gabion mattresses.		Erosion of storm water channel does not occur and stabilisation structures remain intact in heavy runoff conditions.	Engineer		
					Where appropriate, severe gully erosion must be rehabilitated through the introduction of successive gabion sedimentation devices, to create a terraced longitudinal stream profile. These structures must however not restrict the flow of runoff or reduce the stream capacity. Accumulated sediment must be used in the rehabilitation of the stream channel. The design of these devices must be undertaken by a hydrological engineer.		Erosion of storm water channel is halted. Stabilisation structures remain intact in heavy runoff conditions. Sediment cn be easily and effectively removed and is applied during rehabilitation.	Engineer / contractor		

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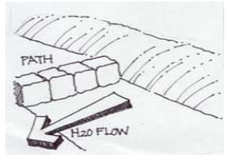
		6 Significant Sedimentation (Construction)	Access roads (CAd-6; CBf-6; CCf-6; CDc-6) Sedimentation as a result of erosion e.g. building footprints, vegetation loss		Ensure that a stormwater management plan is adhered to. Prevent extensive areas of exposed soil. Where soil is exposed, ensure that it is revegetated as soon as possible. Where soil will be stockpiled for more than one season, the stockpile is to be located in an appropriate place, vegetated and haybales placed along the perimeter of the stockpile. To reduce sedimentation of water courses or streets adjacent to the site place hay bales or earth-filled sand bags at the lowest point to trap the sediment.		Approved Stormwater management plan & compliance thereto. Limited areas of exposed soil. Successful re-vegetation. Hay bales or sand-filled bags placed at the lowest point, sediments regularly removed.	Contractor Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		6 Significant Sedimentation (Operations)	Sedimentation as a result of erosion e.g. building footprints, vegetation loss		Prevent extensive areas of exposed soil in the vicinity of the stormwater management structures. Where soil is exposed in the vicinity of the exposed stormwater management sturctures, ensure that it is revegetated as soon as possible.		Limited areas of exposed soil. Successful re-vegetation.	Maintenance Personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		6 Significant Sedimentation (Maintenance)	Sedimentation as a result of erosion caused by maintenance activities e.g. Alien vegetation clearance (MD-6) Resurfacing of roads (MJ-6) Trenching and pipe repairs (MK-6)		Prevent extensive areas of exposed soil in the vicinity of the stormwater management structures. Where soil is exposed in the vicinity of the exposed stormwater management sturctures, ensure that it is revegetated as soon as possible. The maintenance of stormwater structures, particularly with regard to sediment removal is to be undertaken at regular intervals to prevent blockage. Where resufacing of roads is taking place, install hay bales at the lowest point to trap the sediments.		Limited areas of exposed soil. Successful re-vegetation. Stormwater infrastructure is free of significant sediment that would obstruct the effective functioning of the structure. Hay bales are in place.	Maintenance Personnel Maintenance Personnel Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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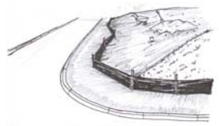
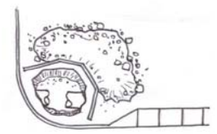
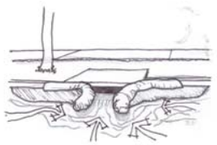
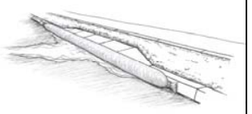
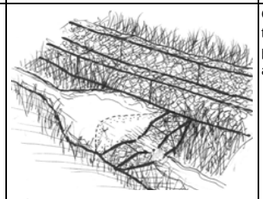
					Where significant sedimentation and washing away of soil may occur during trenching and pipe repairs, sufficient measures are to be taken to retain soil deposits as close to the point of origin as possible.	 	Sediment does not enter inlet structures or exposed pipes during maintenance/ repairs operations.	Contractor / maintenance personnel		
					Storm water inlets situated near maintenance sites that may lead to sedimentation, are to be protected from sediment blockage by sand-filled bags placed alongside the inlets. Accumulated sediment should be regularly removed.	 	Sediment does not enter inlet structures or exposed pipes during maintenance/ repairs or construction operations.	Contractor / maintenance personnel		
		6 Significant Sedimentation (Design)	Design aspects relating to: Cut & fill (DAa-6) Inlets (Dba-6) Outlets (DBb-6) Detention Structures (DBc-6) Retention structures (DBd-6) Artificial Wetlands (DBf-6) Stream channels (DBh-6)		Ensure that all stormwater structures that may be influenced by sedimentation are designed in such a manner as to accommodate the settling of sediments and easy access for sedimentation removal activities.		Stormwater structures that remain free of significnat sediment that would obstruct the effective functioning of the structure. Specifications are in place and activities scheduled by the maintenance personel. The hydrological functioning of the structure is approved.	Engineers	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Where heavy sedimentation continuously occurs in a stream channel, sedimentation devices should be created in the channel, at intervals as determined by a hydrological engineer. These should be provided with a spillway or overflow that allows continuous runoff past the structure, but retaining sediment behind it. Accumulated sediment should be used for stream rehabilitation purposes, unless it is heavily polluted or laden with weed/ alien plant seeds.		Obstruction of stream channels due to accumulated sediment is prevented. Sediment can effectively and easily be removed.	Contractor		

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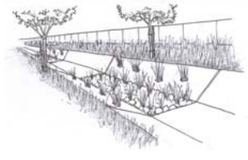
					The maintenance specifications for these structures are to be written and communicated to the personnel responsible for maintenance. The proposed stormwater structures are to be approved by a hydrological engineer.		Maintenance specifications are understood and adhered to.	Maintenance Personnel Engineer		
		7 Soil Compaction/ Impermeability (Construction)	Compaction of the areas where the following temporary functions are situated: Temporary buildings (CAc-7) Materials and building rubble storage areas (CBa-7; CBc-7) Access roads (CAd-7; CBf-7; CCf-7; CDc-7)		Areas that have been compacted are to be ripped and scarified to a depth of 300mm. Remove all rubble such as concrete slabs, bricks, etc. and dispose thereof appropriately. The prepared area is to be re-vegetated with indigenous grasses, trees, or shrubs (which ever is most appropriate)		Successful revegetation of the compacted area.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		7 Soil Compaction/ Impermeability (Operations)								
		7 Soil compaction/ Impermeability (Maintenance)	Compaction of the areas such as maintenance camps, temporary access roads to maintenance areas e.g. Alien vegetation removal (MD-7) Sediment removal (MG-7) Road resurfacing (MJ-7) Trenching and pipe repairs (MK-7)		Areas that have been compacted are to be ripped and scarified to a depth of 300mm. Remove all rubble such as concrete slabs, bricks, etc. and dispose thereof appropriately. The prepared area is to be re-vegetated with indigenous grasses, trees, or shrubs (which ever is most appropriate)		Successful revegetation of the compacted area.	Maintenance personel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		7 Soil Compaction/ Impermeability (Design)	Design aspects of: Roadside edges (DAc-7) Stormwater channel design (DAh-7)		Limit the areas that will be compacted by the construction activities. Locate the areas that will be compacted in an appropriate place, I.e. not at the lowest section of the site where revegetation may be problematic. Ensure that the tender document addresses the requirements for the remediation of compacted areas. Where feasible and appropriate, sections of existing concrete drainage channels should be replaced with gabion mattresses or plantable concrete blocks. This shold only be done where slopes are gentle and the design of these structures should be carried out a by a hydrological engineer.		Limited compaction areas. Logical location for areas that will be compacted. Soil compaction addressed in tender documentation. Where feasible the impermeability of existing concrete storm water channels is reduced. These areas do not deteriorate or erode from heavy runoff.	Engineer Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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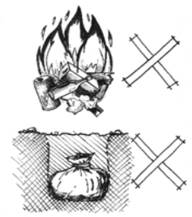
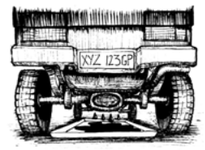
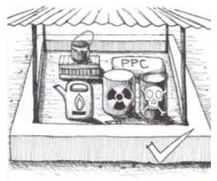
		8 Soil Contamination (Construction)	Cleaning, sanitation & worker activity (CAb-8) Storage of: Chemicals and fuels (CBb-8) Wastes and refuse (CBd-8) Plant & equipment (CBe-8)		Refuse collection and removal: Dustbins and proper refuse area must be designated in the construction camp. NO containers or refuse storage areas will be permitted on other areas of the construction site. Refuse is not to be burried or burnt on site.		Absence of waste stockpiling on site.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Chemical storage: All chemical storage I.e. paint, solvents, fuel etc. is to be stored in a lockable area, on a concrete slab with a 500mm bund wall. The structure is to have a roof. Where applicable the appropriate authorisations from DTEC are to be obtained.		Storage of chemical is undertaken in the appropriate manner. Authorisation has been granted by DTEC.	Contractor		
					Spillages: Spillages are to be reported to the environmental officer on site or to the foreman, the appropriate clean up is to take place and be approved by the environmental officer. The resulting contaminated soil / absorbtion material is to be diposed of in the appropriate manner.		Record of spillages and the remediation is kept.	Contractor		
					Vehicle & plant maintenance: No vehicle or plant maintanace is to take place on site. All vehciles and equipment that have oil leaks are to be reported to the environmental officer on site and repaired as a matter of urgency. If the project requires such repairs on site, a designated area is to be established and managed accordingly. Drip trays must be placed under each contruction vehcile when it is not in operation at all times.		No repairs to vehicles and plant is evident on site or only taking place in designated areas. Soil contamination does not occur from unavoidable repairs on site.	Contractor		
		8 Soil Contamination (Operations)	Could result from negligence or operational problems, at the following: Waste water treatment site (DCb-8) Basic sanitation provision (DCc-8) Storage dumps/ landfill sites (DEb-8)		Chemical storage: All chemical storage I.e. paint, solvents, fuel etc. is to be stored in a lockable area, on a concrete slab with a 500mm bund wall. The structure is to have a roof. Where applicable the appropriate authorisations from DTEC are to be obtained.		Storage of chemical is undertaken in the appropriate manner. Authrisation has been obtained from DTEC.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Spillages: Spillages are to be reported to the environmental officer on site or to the foreman, the appropriate clean up is to take place and be approved by the environmental officer. The resulting contaminated soil / absorbtion material is to be diposed of in the appropriate manner.		Record of spillages and the remediation is kept.	Contractor		

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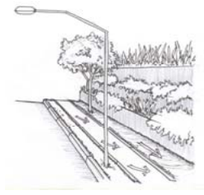
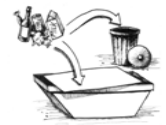
					Vehcile and plant maintenance: No vehicle or plant maintanace is to take place on site. All vehciles and equipment that have oil leaks are to be reported to the environmental officer on site and repaired as a matter of urgency. If the project requires such repairs on site, a designated area is to be established and managed accordingly. Drip trays are to be placed under all vehciles and plant when not in operation.		No repairs to vehicles and plant is evident on site or only taking place in designated areas. Soil contamination does not occur from unavoidable repairs on site.	Contractor		
		8 Soil Contamination (Maintenance)	Could result from the following activities: Mowing (MA-8) Alien vegetation clearing (MD-8) Sediment removal (MG-8) Road resurfacing (MJ-8) Trenching (MK-8) Sewage spill clean-up (ML-8)		Refueling of vehciles and plant: Where the refueling of the vehicles and plant is to take place on site, the appropriate measures are to be taken to reduce soil contamination. Fuel tanks and refueling areas are to be on a concrete slab, with a 500mm bund wall or cut-off drain which prevents spillage from contaminating the surrounding soil.		Refueling on site is being addressed in the appropriate manner.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Chemical storage: All chemical storage I.e. paint, solvents, fuel etc. is to be stored in a lockable area, on a concrete slab with a 500mm bund wall. The structure is to have a roof. Where applicable the appropriate authorisations from DTEC are to be obtained.		Storage of chemical is undertaken in the appropriate manner. Authorisation has been obtained from DTEC.	Contractor		
					Spillages: Spillages are to be reported to the environmental officer on site or to the foreman, the appropriate clean up is to take place and be approved by the environmental officer. The resulting contaminated soil / absorbtion material is to be diposed of in the appropriate manner.		Record of spillages and the remediation is kept.	Contractor		
					Vehicle and plant maintenance: No vehicle or plant maintanace is to take place on site. All vehciles and equipment that have oil leaks are to be reported to the environmental officer on site and repaired as a matter of urgency. If the project requires such repairs on site, a designated area is to be established and managed accordingly. Drip trays maust be placed under each construction vehcile when it is not in operation.		No repairs to vehicles and plant is evident on site or only taking place in designated areas.	Contractor		

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE / EXAMPLE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		8 Soil Contamination (Design)	Landfill sites (DEb-8)		Ensure that the appropriate structures are accommodated on site to mitigate the contamination of soil by chemicals. Ensure that the requirements for the prevention of soil contamination are included in the tender documents. Ensure that the landfill sites have the correct classification and that the appropriate liners, as required by DWAF are in place.		Soil pollution is addressed in the design and planning stage of the project.	Engineers	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		9 Slope Collapse (Construction)	Insufficient support of excavations (CCb-9) This aspect may lead to significant sedimentation, refer to relevent section.		Ensure that excavations are sufficiently supported at all times.		No soil collapse on the construction site.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		9 Slope Collapse (Operations)								
		9 Slope Collapse (Maintenance)	Maintanance of retaining structures (MI-9)		Ensure that the integrity of the retaining structures is not undermined by erosion. This includes: * ensuring positive, controlled drainage behind retaining walls * ensuring that fill behind the retaining walls remains in place.		Retaining structures do not fail.		Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		9 Slope Collapse (Design)	Cut and fill slopes along roads (DAa-9) Storm water inlets (Dba-9) Storm water outlets (DBb-9) Detention structures (DBc-9) Retention Structures (DBd-9) Channels (DBh-9) Storage dumps/ landfill sites (DEb-9)		Ensure that the retaining structures that are designed are appropriate for the function that is to be fulfilled.		Approved building plans.		Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Where embankments alongside roads have to be steep, measures are to be undertaken to prevent collapse of the embankments, such as constructing a retaining wall. These structures are to be designed by an engineer and planted where possible.		No collapse of embankments along steep sections of road,	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES

MUNICIPAL CIVIL INFRASTRUCTURE: SURFACE WATER IMPACTS - EMP MASTER

Date: 2007-12-14	Project No: A1289	Consultant: African EPA	Client: PKSDM

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO / DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO / DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		10 Surface Water Physical Pollution (Construction)	Cleaning, sanitation & worker activity (CAb-10) Storage or dumping of building rubble (CBc-10) Storage of general refuse (CBd-10) Refuse/ rubble removal from site (CDb-10)		All litter and building rubble is to be collected, stored in a central place within the construction camp and diposed of in the appropriate manner. Waste collection is to be undertaken on a regular basis, all weigh bills are to be filed. Litter and refuse are not to be dumped in or stored near any watercourses or water bodies and preventative measures are to be taken to ensure that refuse does not wash out of designated storage areas during heavy rains.	 	Litter and rubble free site. Weigh bills of the waste diposed should be available on request.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		10 Surface Water Physical Pollution (Operations)			All sites that are operational should ensure that no litter is present on site. Any litter is to be collected, stored and disposed of in the appropriate manner.		Litter free site.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		10 Surface Water Physical Pollution (Maintenance)	Following activities may result in pollution: Mowing (MA-10) Pruning (MB-10) Weeding (MC-10) Sediment removal (MG-10) Refuse removal (MH-10)		Litter and waste removal: All litter and building rubble is to be collected, stored in a central place and diposed of in the appropriate manner. Waste collection is to be undertaken on a regular basis, all weigh bills are to be filed. Sediment removal: The material that is to be removed is to be removed and transported in such a manner that it does not pollute the surrounding surface water. The detailed EMP for this activity is to be adhered to. Organic waste removal: All plant cuttings and remains are to be taken to a registered garden refuse drop off point and compost made from the material.		Litter and rubble free site. Weigh bills of the waste diposed should be available on request. No pollution of surface water resources in the vicinity of the sediment removal activities. Compost for use by PKSDM.	Maintenance personel Contractor Maintenance personel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM. Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM. Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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		10 Surface Water Physical Pollution (Design)	Following infrastructure requires physical pollution control: Roadside edges (DAc-10) Inlets (DBa-10) Outlets (DBb-10) Detention & retention structures (DBc-10; DBd-10) Channels (DBh-10) Landfill sites (DEb-10)		Where required & appropriate litter traps are to be incorporated in the design of certain stormwater management infrastructure. Mitigation measures relating to surface water pollution are to be incorporated in the tender documents.		Reduced litter in surface water resources.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		11 Surface Water Sewage Pollution (Construction)	Sanitation and worker activity at the construction camp (CAb-11)		Shower or washing facilities, when provided, must be linked to the existing sewer system or the runoff must be drained to a soak-away system as approved by the ECO or project manager.		Postive drainage of all amenities.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		11 Surface Water Sewage Pollution (Operations)	Sewage treatment works (DCb-11) Basic sanitation provision (DCc-11)	 	Any spillages that may occur in the sewage treatment works are to be cleaned up in the appropriate manner. The site supervisor is to be notified as soon as a problem has arisen. All monitoring as stated in the EMP and DWAF water use license are to be adhered to.		Incident & accident reporting of the event as well as the action taken. Monitoring results are to be made available on request.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		11 Surface Water Sewage Pollution (Maintenance)								
		11 Surface Water Sewage Pollution (Design)	Sewage treatment works (DCb-11) Basic sanitation provision (DCc-11)		Ensure that the operation of the facility is taken into account in the design process and the precautionary principle taken for the design of sewage treatment works. Ensure that the facility has sufficient capacity and does not operate beyond its capacity.		Design that addresses environmental impacts holistically.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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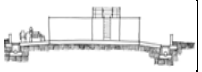
					Provision should be made in the design of additional infrastructure or new treatment plants, for the mitigation of potential spills. This could include a concrete slab around aeration dams with a cut off drain, or emergency overflow. These systems should release excess sewage into the dry beds. However said measures should only be for emergency use, untill the capacity of the treatment works has been sufficiently increased.			Engineer		
		12 Surface Water Biological Pollution (Construction)	Cleaning, sanitation and general worker activity at the construction camp (CAb-12)		Ensure that no raw sewage enters any water resources. VIP latrines should be provided in the construction camp. Pit latrines and soakaways should only be used if the geo-hydrological assessment indicates that it is acceptible to do so. Said structures should be located outside any flood lines or as indicated by a specialist. Only ablution facilities provided in the construction camp may be used for this purpose. Non-compliance or using the rest of the site as latrine must be fined.	 	Monitoring the water quality data. No pollution of water due to worker activities. No human waste or unauthorised ablution on site.	Contractor Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		12 Surface Water Biological Pollution (Operations)	Sewage Treatment works (CCb-12)		Ensure that no raw sewage enters any water resources.		Monitoring the water quality data.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		12 Surface Water Biological Pollution (Maintenance)								
		12 Surface Water Biological Pollution (Design)	Sewage Treatment works (CCb-12)		Ensure that the operation of the facility is taken into account in the design process and the precautionary principle taken for the design of sewage treatment works. Ensure that the facility has sufficient capacity and does not operate beyond its capacity.		Design that addresses environmental impacts holistically.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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		13 Surface Water Chemical Pollution (Construction)	Fuel storage (CBb-13) Mixing of materials (CDa-13)		Mixing of materials: Run-off produced by aggregate washing, concrete mixing and curing should be regulated by erosion control measures. All mixing of materials should take place at a suitable distance from the any water resources. Concrete mixing shall only take place within the designated areas on site. Refueling: Where the refueling of the vehicles and plant is to take place on site, the appropriate measures are to be taken to reduce the potential of surface water contamination. Fuel tanks and refueling areas are to be on a concrete slab, with a 500mm bund wall or cut-off drain which prevents spillage from contaminating the surrounding soil. Chemical storage: All chemical storage I.e. paint, solvents, fuel etc. is to be stored in a lockable area, on a concrete slab with a 500mm bund wall. The structure is to have a roof. Where applicable the appropriate authorisations from DTEC are to be obtained.	 	No evidence of run-off into the surrounding water courses. Mixing takes place at a resonable distance from water courses. Designated areas for concrete mixing. Refueling on site is being addressed in the appropriate manner. Storage of chemical is undertaken in the appropriate manner. Authorisation has been obtained from DTEC.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Chemical spillages: Spillages are to be reported to the environmental officer on site or to the foreman, the appropriate clean up is to take place and be approved by the environmental officer.		Record of spillages and the remediation is kept.			
		13 Surface Water Chemical Pollution (Operations)	Waste water treatment works (DCb-13) Chemical & Fuel storage		Refueling: Where the refueling of the vehicles and plant is to take place on site, the appropriate measures are to be taken to reduce the potential of surface water contamination. Chemical storage: All chemical storage I.e. paint, solvents, fuel etc. is to be stored in a lockable area, on a concrete slab with a 500mm bund wall. The structure is to have a roof. Where applicable the appropriate authorisations from DTEC are to be obtained. Chemical spillages: Spillages are to be reported to the environmental officer on site or to the foreman, the appropriate clean up is to take place and be approved by the environmental officer.		Refueling on site is being addressed in the appropriate manner. Storage of chemical is undertaken in the appropriate manner. Authorisation has been obtained from DTEC. Record of spillages and the remediation is kept.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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		13 Surface Water Chemical Pollution (Maintenance)	Treating of weeds with pesticides (MC-13) Chemical treatment of alien invader plant species (MD-13) Careless litter and refuse removal (MH-13) Road resurfacing (MJ-13)		Refueling: Where the refueling of the vehicles and plant is to take place on site, the appropriate measures are to be taken to reduce the potential of surface water contamination.		Refueling on site is being addressed in the appropriate manner.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					In areas where refuse is removed, the operator is to ensure that all the refuse is collected. Where spillage of refuse has occurred, it is to be collected and disposed of accordingly.		No sign of spillage or litter pollution.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Chemical spillages: Spillages are to be reported to the environmental officer on site or to the foreman, the appropriate clean up is to take place and be approved by the environmental officer.		Record of spillages and the remediation is kept.	Maintenance personnel		
					Ensure that the requirements for the prevention of soil contamination are included in the tender documents. Ensure that the landfill sites have the correct classification and that the appropriate liners, as required by DWAF are in place.		Soil pollution is addressed in the design and planning stage of the project.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Access roads: Ensure that the roads are slighly above the natural ground level to ensure positive drainage. Along temporary roads, water drainage channels are to be constructed in the appropriate manner to prevent erosion.		Access roads above natural ground level. Approprite drainage channels along temporary roads.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Backfilling: All excavated areas are to be backfilled in layers of 150mm and compacted prior to the placement of the next layer.		No sagging / settling of compacted areas occurs.			
					Positive drainage on site: All levels on the site are to be in accordance with the design drawings. Ponding is to be prevented by ensuring positive drainage in all areas of the site.		No ponding is evident on site.			

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		14 Drainage Problems (Operations)			Positive drainage on site: All levels on the site are to be such that postive drainage can take place. Ponding is to be prevented by ensuring positive drainage in all areas of the site. Stormwater management: All inlets, outlets, detention and retention structures are to be maintained in such a manner that the flow of water is not obstructed in any manner to ensure effective functioning of the structure. The material that is removed from these structures is to be disposed of in the appropriate manner.		No ponding is evident on site. No indications of stormwater ponding or causing flooding of any areas. Free-flowing inlets outlets and pipes.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		14 Drainage Problems (Maintenance)	Poor irrigation practice which leads to ponding (MF-14) Trenching/ pipe repairs (MK-14)		Irrigation points/ sprinklers should be so positioned that they do not cause runoff to accumulate in low-lying areas; and positive site leveling should be ensured to prevent ponding from occuring. Irrigation programs and timing should be based on the requirements of the landscape planting design and unneccessary irrigation is to be avoided.		No ponding due to excessive or inappropriate irrigation practices evident on site.	Contractor/ Maintenance personel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
					Stormwater management: All inlets, outlets, detention and retention structures are to be maintained in such a manner that the flow of water is not obstructed in any manner to ensure effective functioning of the structure. The material that is removed from these structures is to be disposed of in the appropriate manner.		No indications of stormwater ponding or causing flooding of any areas.			
		14 Drainage Problems (Design)	Stormwater considerations relating to the design of the following: Roadside edges (DAc-14) Inlets (DBa-14) Outlets (DBb-14) Detention structures (DBc-14) Retention structures (DBd-14) Artificial wetlands (DBf-14) Pipes (DBg-14) Channels (DBh-14)		Positive drainage on site: All levels on the site are to be such that postive drainage can take place. Ponding is to be prevented by ensuring positive drainage in all areas of the site. General: Ensure that the aspects of drainage are adequately addressed in the tender document as well as how drainage problems are to be resolved.		Resolved levels prior to construction commencing.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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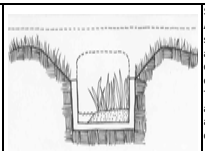
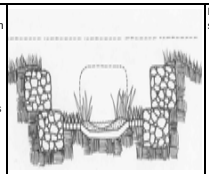
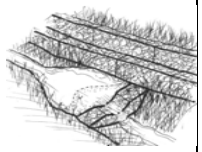
					Stormwater management: All inlets, outlets, detention and retention structures are to be maintained in such a manner that the flow of water is not obstructed in any manner to ensure effective functioning of the structure. The design is to accommodate easy access and cleaning of these structures and not cause excessive sedimentation or collection of debris.	 	Effectively functioning stormwater structures.			
		15 Anaerobic Conditions (Construction)								
		15 Anaerobic Conditions (Operations)	Waste water treatment works (DCb-15)		Should anaerobic conditions arise, a specialist is to be consulted.		Specialist consulted and condition resolved.		Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		15 Anaerobic Conditions (Maintenance)	Detention & retention structures - 14 sediment removal (MG-15)		Should anaerobic conditions arise, a specialist is to be consulted.		Specialist consulted and condition resolved.		Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		15 Anaerobic Conditions (Design)	Detention & retention structures, artificial wetlands (DBc-15; DBd-15; DBf-15)		Designs should ensure that anaerobic conditions will not operate in the plants unless so intended.		Specialist consulted and condition resolved.		Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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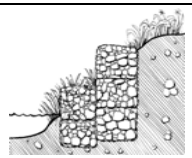
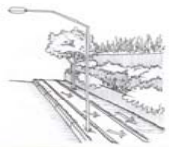
		16 Increased Runoff Rate (Construction)	Access roads with steep slopes which increases the speed of run-off (CAd-16; CBf-16; CCf-26; CDc-16) Levels on site which do not adequately direct storm water runoff or are to steep (CDd-16)		Where increased run-off is evident on the site, measures are to be taken to reduce the speed of run-off. This can be accomplished by placing gravel or establishing cut-off mounds that drain the water to a designated area where the speed of flow is retarded as the water flows over the grassed areas.Sheetflow from the site is to be directed into the stormwater structures that are to be established on site.	 	No erosion, as a result of increased run-off rate visible on site.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		16 Increased Runoff Rate (Operations)	All sites		Where increased run-off is evident on the site, measures are to be taken to reduce the speed of run-off. This can be accomplished by placing gravel or establishing cut-off mounds that drain the water to a designated area where the speed of flow is retarded as the water flows over the grassed areas.		No erosion, as a result of increased run-off rate visible on site.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		16 Increased Runoff Rate (Maintenance)	Steep slopes increase the speed of run-off Compacted Areas arising from road resurfacing (MJ-16) and any other maintenance requiring heavy vehicles		Where increased run-off is evident on the site, measures are to be taken to reduce the speed of run-off. This can be accomplished by placing gravel or establishing cut-off mounds that drain the water to a designated area where the speed of flow is retarded as the water flows over the grassed areas.		No erosion, as a result of increased run-off rate visible on site.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		16 Increased Runoff Rate (Design)	Design aspects relating to: Roadside edges (DAc-16) Channels (DBh-16)	 	Slopes along roads, and channel embankments are not to exceed a 1:3 gradient. Where this is not feasible such embankments shall be stabilised with plantable concrete blocks, gabions or retention walls, as appropriate.	 	No erosion taking place on site due to the establishment of structures that assist in the reduction of stormwater flow.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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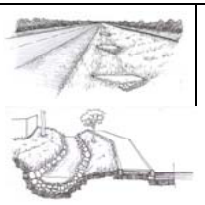
					Where feasible, vegetated swales are to be used to channel stormwater run-off alongside roads. Alternatively packed stone is to be used, where runoff rates will allow it. Retention and detention structures can be designed into the stormwater management plan of the site.	 				

PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES

MUNICIPAL CIVIL INFRASTRUCTURE: GROUND WATER IMPACTS - EMP MASTER

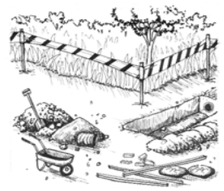
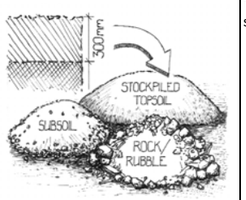
Date: 2007-12-14	Project No: A1289	Consultant: African EPA	Client: PKSDM

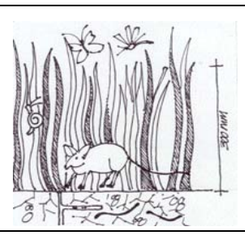
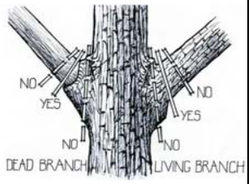
RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSI-BILITY	NOTES/ GENERAL	SIGN. + DATE
		17 Ground Water Biological Pollution (Construction)								
		17 Ground Water Biological Pollution (Operations)	Waste water collection (DCa-17) Waste water treatment (DCb-17) Basic sanitation provision (DCc-17) Landfill sites (DEb-17)		Should such a condition arise, a specialist is to be consulted.		Specialist consulted and condition resolved.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		17 Ground Water Biological Pollution (Maintenance)	Negligent or insufficient sewage spill cleanup (ML-17)		Should such a condition arise, a specialist is to be consulted.		Specialist consulted and condition resolved.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		17 Ground Water Biological Pollution (Design)	Waste water collection (DCa-17) Waste water treatment (DCb-17) Basic sanitation provision (DCc-17) Landfill sites (DEb-17)		Designs should ensure that biological pollution of the ground water is prevented.		Specialist appointed to verify designs.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		18 Ground Water Chemical Pollution (Construction)	On site storage of chemicals and fuels (CBb-18)		Should such a condition arise, a specialist is to be consulted.		Incident report which states cause of the spill as well as how the situation was remediated.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		18 Ground Water Chemical Pollution (Operations)	Waste water treatment works (DCb-18) Negligent or inappropriate operational procedures at landfill sites and storage dumps (DEb-18)		Should such a condition arise, a specialist is to be consulted.		Specialist consulted and condition resolved.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

		18 Ground Water Chemical Pollution (Maintenance)	Treating of weeds with pesticides (MC-18) Chemical treatment of alien invader plant species (MD-18) Careless litter and refuse removal (MH-18) Road resurfacing (MJ-18)		Should such a condition arise, a specialist is to be consulted.		Specialist consulted and condition resolved.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		18 Ground Water Chemical Pollution (Design)	Waste water treatment works (DCb-18) Insufficient landfill sites and storage dumps design (DEb-18)		Designs should ensure thatchemical pollution of the ground water is prevented.		Specialist appointed to verify designs.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

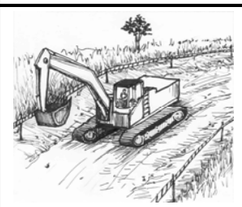
PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES	
MUNICIPAL CIVIL INFRASTRUCTURE: FAUNA AND FLORA IMPACTS - EMP MASTER	

Date: 2007-12-14	Project No: A1289	Consultant: African EPA	Client: PKSDM

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		19 Habitat & vegetation loss (Construction)	Cooking areas and fires (CAa-19) Cleaning, sanitation worker activities on site (CAb-19) Temporary and permanent buildings on site (CAc-19) Access Roads (CAd-19; CBf-19; CCf-19; CDc-19)		Access & construction roads must be established in areas that are already disturbed, e.g. where alien vegetation has been removed, tracks exist etc. Loss of habitat and vegetation as a result of the construction activities is to be minimised as far as possible. Trees that have been identified by a suitably qualified person are to be retained as best possible during the construction phase. Areas where vegetation loss has occurred as a result of construction activities are to be rehabilitated as per the site specific EMP. Topsoil is to be stripped in such a manner that the seed bank is contained therein (first 300mm of soil). This topsoil is to be stockpiled separately and utilized specifically for rehabilitation purposes. The site specific EMP is to be adhered to.	   	Access roads and other infrastructure located in disturbed areas. Few areas of habitat and vegetation loss. Marked trees on site that are protected e.g. fenced). Areas being rehabilitated successfully. Topsoil (first 300mm) separately stockpiled. Site specific EMP being adhered to.	Contractor Contractor Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		19 Habitat & vegetation loss (Operations)			Rehabilitated areas are to be maintained and where rehabilitation is not successful are to be reinstated. The site specific EMP is to be adhered to.			Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		19 Habitat & vegetation loss (Maintenance)	Careless or inappropriate mowing (MA-19) Careless or inappropriate pruning (MB-19) Alien vegetation clearance (MD-19)		No vegetation is to be removed arbitrarily unless it is interfering with the operation of the facility, Weeds and alien invader vegetation should be removed in all instances. The blades of the mowers are to be set at the appropriate height to ensure that the grass is not cut too short.		Retained habitats on site.	Operator/ Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
				 	When pruning trees and larger shrubs, care should be taken to avoid stub-and flush cutting, or merely "tipping" (removing the ends of branches) as these practices may lead to distressed or diseased vegetation, which may eventually die.		No damage to plants from pruning activities	Operator/ Maintenance personnel		
		19 Habitat & vegetation Loss (Design)	Positioning and specific design of the following facilities and infrastructure could lead to habitat and vegetation loss: Cut and fill slopes along roads (DAa-19) Stormwater inlets and outlets (DBa-19; DBb-19) Waste water treatment facilities (DCb-19) Water purification works (DDe-19) Reservoir sites (DDg-19) Landfill and dumping sites (DEb-19) Powerlines servitudes (DFb-19)		No vegetation is to be removed arbitrarily unless it is interfering with the operation of the facility, Weeds and alien invader vegetation should be removed in all instances and these areas rehabilitated with indigenous vegetation. Where possible buildings, facilities and structures should be located to avoid the loss of areas of indigenous vegetation.		Retained habitats on site.	Maintenance Personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
			Loss of potential habitat areas arising from the extensive use of exotic, water-consuming plant species (DAb-19)		Where possible roadside planting should be indigenous species that require limited irrigation.		Roadside planting offers habitat and is a source of food to bird species.	Contractor		
		20 Habitat Fragmentation (Construction)	Positioning of acces roads on site (CAd-20; CBf-21; CCf-20; CDc-20)		Construction activities are to avoid breaking up clumps of vegetation for access purposes. Construction vehicles are to move around these clumps.		No fragmentation of habitats unless unavoidable.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		20 Habitat Fragmentation (Operations)	Operational actions at the following facilities and structures: Waste water treatment facilities (DCb-20) Water purification works (DDe-20) Reservoir sites (DDg-20) Landfill and dumping sites (DEb-20) Powerlines servitudes (DFb-20)		The activities associated with the operation of the plant should avoid breaking up clumps of vegetation for access purposes. Alternative routes are to be used. Only the minimum amount of vegetation around facilities must be removed to maintain safety and operational requirements and allow maintenance personnel access to facilities.		No fragmentation of habitats unless unavoidable.	operator/ maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		20 Habitat Fragmentation (Maintenance)								
		20 Habitat Fragmentation (Design)	Design and positioning of the following facilities and structures: Waste water treatment facilities (DCb-20) Water purification works (DDe-20) Reservoir sites (DDg-20) Landfill and dumping sites (DEb-20) Powerlines servitudes (DFb-20)		Layout of the proposed development is to take cognizance of habitats. The recommendations stated in the ecological report, undertaken as part of the EIA are to be incorporated in the design process.		Ecologically sensitive design.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

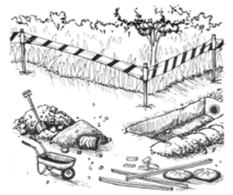
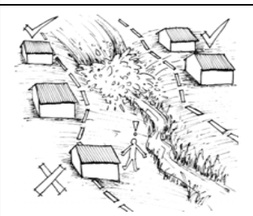
RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		21 Habitat Degradation/ Disturbance (Construction)	Inappropriate location of access roads could lead to environmental degradation or disturbance - including weed growth and alien invader plant species proliferation (CAd-20; CBf-21; CCf-21; CDc-21)		Access & construction roads must be established in areas that are already disturbed, e.g. where alien vegetation has been removed, tracks exist etc. The site specific EMP is to be adhered to in this regard.		No sign of disturbed areas on site. Compliance with EMP	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		21 Habitat Degradation/ Disturbance (Operations)	Operational actions at the following facilities and structures: Waste water treatment facilities (DCb-21) Bulk water lines (DDc-21) Water purification works (DDe-21) Reservoir sites (DDg-21) Landfill and dumping sites (DEb-21) Powerlines servitudes (DFb-21)		Cognizance is to be taken of ecologically important areas. Where possible operational movement around plant and facilities is to be limited, to avoid disturbance of remaining habitat areas. The site specific EMP is to be adhered to in this regard.		No sign of disturbed areas on site. Compliance with EMP	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		21 Habitat Degradation/ Disturbance (Maintenance)	Carelessness during weeding/ alien plant clearance activities (MC-21; MC-22) Inadequate re-planting of embankments, slopes or rehabilitated areas (ME-21) Sediment removal (MG-21) Embankment structural maintenance (MI-21) Road resurfacing (MJ-21) Trenching/ pipe repairs (MK-21)		Cognizance is to be taken of ecologically important areas. Weeds and alien invader plant species removed from any area should be disposed off at a garden refuse site or as specified in the EMP. Care must be taken to prevent propagative material from getting into watercourses or ecologically sensitive areas during weeding/ alien vegetation clearance. Adequate measures should be taken during site rehabilitation activities, to prevent the spread of weeds or possible alien invader plant species. Stored topsoil should be used for this purpose and continued weeding must be done during the initial establishment of the planted vegetation, as required. The site specific EMP is to be adhered to in this regard.		No sign of disturbed areas on site. Compliance with EMP	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

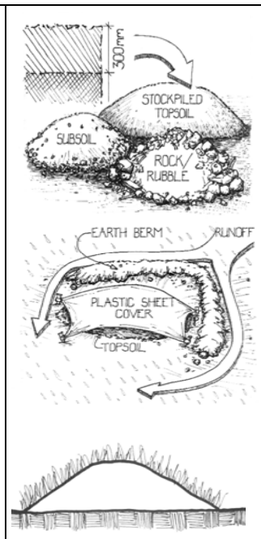
RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		21 Habitat Degradation/ Disturbance (Design)	Accumulated sediment, litter and alien plant seeds in storm water management structures (DBa-21; DBb-21; DBc-21; DBd-21; DBe-21; DBf-21; DBh-21)		Layout of the proposed development is to take cognizance of habitats. Designs of all storm water systems are to facilitate the easy and effective removal of weed growth, accumulated materials, sediment and pollution. The recommendations stated in the ecological report, undertaken as part of the EIA are to be incorporated in the design process.		No sign of disturbed areas on site. No disturbance to watercourse vegetation or adjacent habitat caused by storm water structures. Compliance with EMP	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		22 Poaching (Construction)	Worker activity on site (CAb-22)		No poaching is allowed on or in the vicinity of the site. No collection of firewood, from vegetated areas on or near the site is allowed. Employees found to be undertaking such activities will be fired. Inform employees accordingly.		No evidence of snares, skins etc. No damaged trees or other planting.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		22 Poaching (Operations)	All plant or facilities situated in remote locations or near natural habitat areas.		No poaching is allowed on or in the vicinity of the site. No collection of firewood, from vegetated areas on or near the site is allowed. Employees found to be undertaking such activities will be fired. Inform employees accordingly.		No evidence of snares, skins etc. No damaged trees or other planting.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		22 Poaching (Maintenance)	Alien vegetation removal or other maintenance activities in remote locations or near natural habitat areas.		No poaching is allowed on or in the vicinity of the site. No collection of firewood, from vegetated areas on or near the site is allowed. Employees found to be undertaking such activities will be fired. Inform employees accordingly.		No evidence of snares, skins etc. No damaged trees or other planting.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		22 Poaching (Design)								

PIXLEY KA SEME DISTRICT MUNICIPALITY - MUNICIPAL INFRASTRUCTURE GUIDELINES

MUNICIPAL CIVIL INFRASTRUCTURE: OTHER IMPACTS - EMP MASTER

Date: 2007-12-14	Project No: A1289	Consultant: African EPA	Client: PKSDM

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		23 Other impacts - Sensitive areas (construction)			Sensitive areas are to be fenced and include an appropriate buffer zone. Ensure that no building activity takes place in the demarcated sensitive areas. Measures stated in the site specific EMP are adhered to.		Fenced sensitive areas. No building activities in sensitive areas. Compliance with site specific EMP	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Sensitive areas (operation)			Ensure that no activities associated with the operation of the facility are taking place in the sensitive areas. Measures stated in the site specific EMP are to be adhered to.		No sign of operation activities taking place in sensitive areas. Compliance with site specific EMP	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Sensitive areas (maintenance)			Ensure that no activities associated with the maintenance of the facility are taking place in the sensitive areas. Measures stated in the site specific EMP are to be adhered to.		No sign of inappropriate maintenance activities taking place in sensitive areas. Compliance with site specific EMP	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Sensitive areas (design)			Ensure that all building footprints are outside any sensitive areas e.g. ridges, flood plains etc. Ensure that mitigation measures are proposed in the EMP for the environmental management of these areas.		No buildings in sensitive areas. Management of sensitive areas included in EMP.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		23 Other impacts - Topsoil management (construction)			The contractor is to strip topsoil from the relevant areas as identified and stockpile the material prior to the commencement of the construction activities. Topsoil should be stored separately from other excavated material and building rubble. Topsoil stockpiles are not to exceed 1.5m in height, and placed in locations that will not interfere with building activities. Topsoil is only to be handled twice - once to strip and stockpile and secondly to replace where required. Topsoil should be stockpiled in the appropriate manner to prevent erosion and compaction of the stockpiled soil. If the stockpile is remain on site for more than one season it is to be vegetated.		Stockpile of topsoil in the agreed position. Stockpiles are not higher than 1.5m. Stockpiles have hay bales on the perimeter and are not situated in drainage channels. Vegetated stockpile (if required).	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Topsoil management (operation)			Conditions stipulated in the site specific EMP are to be adhered to. Stockpile should be vegetated, and vegetation maintained.		Compliance with site specific EMP. No erosion of stockpile evident.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Topsoil management (maintenance)			Conditions stipulated in the site specific EMP are to be adhered to. Stockpile should be vegetated, and vegetation maintained.		Compliance with site specific EMP. No erosion of stockpile evident.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Topsoil management (design)			Areas that are to be stripped of topsoil for the building and infrastructure is to be limited. Ensure that the aspect of topsoil management is addressed in the EMP.		Limited areas requiring topsoil stripping. Inclusion of topsoil management in EMP.	Engineers	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Alien vegetation (Construction)			Eradication of alien invasives is to be supervised by persons that have a fundamental knowledge of such activities. In the event of alien invasives being eradicated using chemicals, the manufacturers application specifications area to be adhered to. Clearing of alien vegetation is to be undertaken by using best practice principles or as stated in the site specific EMP.			Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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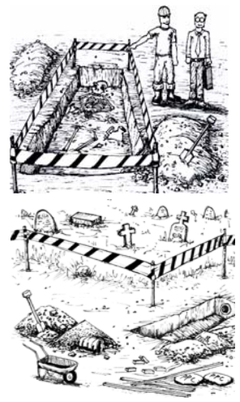
		23 Other impacts - Alien vegetation (operation)			Undertake follow up treatment of the areas that were cleared during the construction phase as required. Adhere to the measures stated in the site specific EMP.		Alien vegetation free site. Compliance with EMP.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Alien vegetation (maintenance)			Undertake follow up treatment of the areas that were cleared during the construction phase as required. Adhere to the measures stated in the site specific EMP.		Alien vegetation free site. Compliance with EMP.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Alien vegetation (design)			When designing new facilities or infrastructure, ensure that a programme is developed for the removal of alien vegetation. Try to locate building or infrastructure footprints in these disturbed areas.		Management of alien vegetation from the outset of project. Building and infrastructure footprints in disturbed areas.	Engineer, project manager	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Protection of cultural & historical features (construction)			Cultural and Historic features are to be fenced. An appropriate buffer is to be established within the fence line. If any other archaeological findings are made during the excavation process e.g. graves, artefacts etc. the project leader and SAHRA is to be notified immediately. All measures stated in the site specific EMP are to be adhered to.		Fenced historical and cultural features. Notification to and from SAHRA if artefacts etc. are found. Compliance with EMP.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Protection of cultural & historical features (operation)			Follow the measures stipulated in the EMP.		Adherence to the EMP.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Protection of cultural & historical features (maintenance)			Follow the measures stipulated in the EMP.		Adherence to the EMP.	Maintenance personnel	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Protection of cultural & historical features (design)			Identify all cultural and historical features. Determine the importance of these features by consulting SAHRA. Undertake the necessary action to include these features in the design of the new facility or infrastructure.		Plan indicating the position (where possible) of historical / cultural features Correspondence from SAHRA. Design that takes cognizance of the features.	Engineer	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

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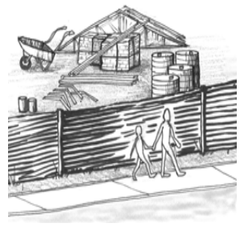
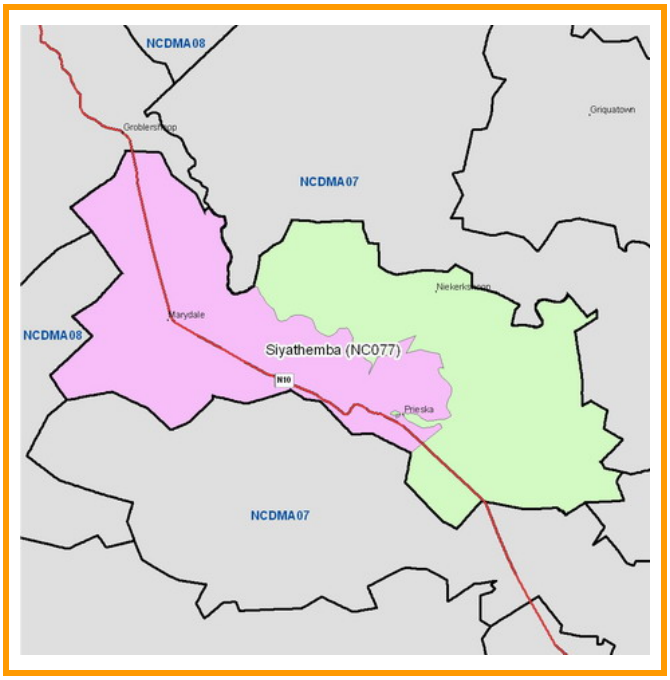
		23 Other impacts - Visual Impact of proposed development (construction)			All materials are to be stored in such a manner and location that it does not cause a visual impact. Construction rubble is to be removed from site on a regular basis. Areas that are disturbed are to be rehabilitated in the appropriate manner.		Neat site. No stockpiling of rubble. Successful rehabilitation of disturbed areas.	Contractor	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Visual Impact of proposed development (operation)			Should an operation be expanded, the structures are to be constructed with materials that are similar in nature to the existing infrastructure.		No unsightly additions.	Operator	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Visual Impact of proposed development (maintenance)			All maintenance activities are to take cognizance of the original aesthetic of the structure and use the same material where possible.		No unsightly maintenance.	Maintenance personnel.	Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Visual Impact of proposed development (design)			Height restrictions and no-building zones may have been identified in the EIA process, these are to be adhered to.				Precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Development on Dolomitic Areas (construction)			Trenches and excavation works should be opened and closed as rapidly as possible. All trenches and excavation works must be properly backfilled and compacted. Once services/cables are installed and backfilling is completed, it must be ensured that ground surface is graded to match the slope of the surrounding area. No rocks should be placed in the top layer. Berms should be constructed on the up-slope side of trenches to prevent the inflow of water during storms. The fall of trenches shall be away from buildings. No ponding of surface water is to be permitted over, in or in the vicinity of trenches and excavations. Preparation of the site must ensure adequate sloping to facillitate drainage of storm water. The slope must be according to the recommendations of the engineer. Water leakage detection must be done after the installation of services. All wet services pipes must be water tight and pressure tested for leakages.		No poding of surface runoff water occurs in trenches. Final levels after construction is complete match the surrounding natural ground levels. Inflow of storm water into trenches during storms is averted. No ponding occurs where such ponding may be detrimental due to the presence of trenches. Positive drainage away from undesired locations occurs. Regular leak detection is done, which prevents the occurence of leaks.		General compliance with NHBRC Standard is required. Furthermore precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
		23 Other impacts - Development on Dolomitic Areas (operation)			Water leakage detection must be done after the installation of services. Furthremore water leakage testing should be conducted at least every two years. No ponding of surface water is to be permitted over, in or in the vicinity of wet service servitudes or pipes. Owners or operation personnel should be informed where services traverse so that accidental puncturing of pipes does not occur.		Regular leak detection is done, which prevents the occurence of leaks. No ponding occurs where such ponding may be detrimental due to the presence of trenches. Accidental damage to pipes does not occur.		General compliance with NHBRC Standard is required. Furthermore precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Development on Dolomitic Areas (maintenance)			Water leakage detection must be done after the installation of services. Furthremore water leakage testing should be conducted at least every two years. No ponding of surface water is to be permitted over, in or in the vicinity of wet service servitudes or pipes. Owners or operation personnel should be informed where services traverse so that accidental puncturing of pipes does not occur.		Regular leak detection is done, which prevents the occurence of leaks. No ponding occurs where such ponding may be detrimental due to the presence of trenches. Accidental damage to pipes does not occur.		General compliance with NHBRC Standard is required. Furthermore precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	
		23 Other impacts - Development on Dolomitic Areas (design)			Brick and precast concrete walls must be so designed as to provide drainage ports at ground level permitting passage of maximum probable volumes of water. The free flow of surface water should be ensured where the layout of the design may cause runoff to be trapped in low-lying areas. A lined canal should permit passage of water into a drain or onto a lawn some distance away from structures. Piping materials selected should be appropriate to local subsurface conditions. Clay pipes are not recommended. Some soils may have low pH values which will render the use of ferrous material for underground services unsuitable. In such instances High impact PVC or other flexible pipes as required shall be used. Pipes should be flexible where possible, while joints sould be minimised. Differential movement must also be accommodated without causing the pipes to break.		The maximum volumes of surface runoff is allowed to pass concrete precast and brick walls. Adequate positive drainage occurs on the entire site. Clay pipes are not used unless specifically required. Deterioration or corrosion of pipes does not occur due to inappropriate material or pipe selection. Pipes do not break, crack or leak due to insufficient differential movement.		General compliance with NHBRC Standard is required. Furthermore precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM. Chapter II in "A Technical Guide to Good House Construction" NBRI of the CSIR (July 1984) should be consulted in areas where soils with low pH values are encountered. General compliance with NHBRC Standard is required. Furthermore precautions are to be undertaken to the satisfaction of the PM and the Environmental Management Division of the PKSDM.	

RELEVANT LEGISLATION/ STANDARDS	REFERENCE DRAWING/ SHEET NO.	SPECIFIC IMPACTS	POSSIBLE CAUSE	IMPACT PHOTO/ DRAWING EXAMPLE	MITIGATION MEASURE	MITIGATION PHOTO/ DRAWING EXAMPLE	PERFORMANCE INDICATOR/ VERIFICATION	RESPONSIBILITY	NOTES/ GENERAL	SIGN. + DATE
					Water reticulation to buildings should be kept at a minimum depth of 500mm up to the structure. As many services as possible should also be accommodated in the same trench. Encasement of pipes in concrete or soilcrete should be avoided. Preferably place pipes in sleeves. If this cannot be achieved, care must be taken to ensure that differential movement can still be accommodated without the pipe breaking. Placement of wet services below the footprint of structures must be avoided. No plumbing and drainage pipes should be placed under floor slabs. Wherever practical, service trenches shall not be excavated along the length of structures or buildings within the first 3m beyond the perimeter of such units. Rodding eyes or similar access to the sewer connection should be provided in addition to the inspection eye/s. The roots of trees planted in close proximity to the line of water-bearing services often cause leaks in or malfunctioning of the services. Care should therefore be taken to avoid the unfortunate positioning of trees and other plants. No trees should be planted within 1,5 times their mature height from the line of storm water services. No accumulation of surface water is to be permitted and the entire development must be properly drained. Surface run-off must not be allowed to pond on the up-slope side of the development. A minimum gradient of 1:150 should be maintained along storm water systems. All ponds and water courses should be rendered impervious. The storm water drainage shall incorporate measures to ensure water tightness of conduits. Whenever possible, storm water should be channeled in lined, surface canals. Where relevant all street levels are to be sufficiently lower than the stand or facilities to ensure easy drainage to storm water management systems.		The amount of trenches for service provision is minimised. Where possible pipes are not placed in concrete or soilcrete and in all instances adequate differential movement is accommodated. Wet services are not placed below building footprints and disturbance or damage for servicing and repair purposes is kept to a minimum. Sufficient access for inspection and maintenance of sewerage and wet systems is provided. Tree roots do not cause damage to services or trenches. Tree roots do not cause damage to services or trenches. Effective drainage of the site is achieved. No erosion or infiltration along watercourses or ponds occurs. Effective drainage from the site to the street and storm water management system occurs.			

SIYATHEMBA MUNICIPALITY



INTEGRATED WASTE MANAGEMENT PLAN FOR THE SIYATHEMBA MUNICIPALITY

FINAL

October 2007

KWEZI V3 ENGINEERS

Client:

Siyathemba Municipality

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PROJECT NO: 227040PW0

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APPENDIX A: PERMIT FOR PRIESKA LANDFILL

APPENDIX B: TYPICAL PROCEDURE FOR LANDFILL AUTHORISATION

TECHNICAL DEFINITIONS

Aquifer is a water bearing formation capable of supplying a sufficient yield for a community based potable water source.

Cell is a volume of waste generally placed during one working day and covered on all horizontal surfaces by cover soil.

Communal Landfill is the smallest landfill classification with a capacity of less than 25 tonnes per day.

Composting is the controlled aerobic biological decomposition of organic matter, such as food scraps and plant matter, into humus, a soil-like material. Aerobic is the decomposition process in the presence of oxygen.

Confirmation of Site Feasibility is the initial step in the DWAF permitting process that establishes the basic site features and general feasibility for a fully permitted landfill.

Controlled landfill is a solid waste management facility used for the disposal of non-hazardous domestic waste and non-infectious medical waste, which employs compaction of wastes, covering of waste with soil cover material, and the management of leachate and gaseous materials produced by the organic decomposition of the landfilled waste, all in such a manner as not to harm human health and minimize negative impacts to the environment.

Daily cover is a daily application and compaction of approximately 15 centimetres of soil intended to control blowing litter, odours, flies, rats and fires, intended for an exposure of less than one week.

Design Drawings are drawings prepared by the landfill designer and include dimensions, specifications and other technical data regarding the construction of the landfill.

Domestic solid waste (General Waste) is solid waste generated by single or multifamily residential dwellings, and solid waste of a non-hazardous nature, generated by wholesale, retail, institutional or service establishments such as office buildings, stores, markets, restaurants, theatres, hotels, warehouses, industrial operations and manufacturing processes.

Final Cover is an application and compaction of soil on the landfill after it has reached its designed elevation. The final cover soil shall be relatively impermeable and have a thickness of approximately 50 centimetres.

Groundwater is all waters flowing or existing under the ground surface.

Hazardous waste is any waste, which by reason of chemical reactivity, or toxic, explosive, corrosive or other characteristics causes danger or is likely to cause danger to human health or the environment, whether alone or in combination with other wastes. Hazardous waste is categorized in four hazard ratings with 1 being the most hazardous and 4 being the least hazardous.

Incineration is the controlled combustion of solid waste employing closed combustion chambers, controlled combustion air, temperature monitoring and control to insure complete combustion of organic matter with a minimum of undesirable air emissions and wastewater discharges.

Intermediate cover is an application and compaction of cover having the same functions as daily cover but applied at a thickness of 30 centimetres, intended to be exposed for a period of one week to one year.

Landfill Classification is a system under the DWAF Minimum Requirements for classifying landfill according to the type and size (TPD) of the landfill, and its potential for significant leachate generation.

Landfill gas is the gaseous by-product of organic decomposition of landfilled waste. Landfill gas contains significant concentrations of methane gas, which is explosive at concentrations exceeding 5 percent.

Leachate is the liquid by-product of organic decomposition of landfilled waste or any liquid that comes in contact with solid waste in a sanitary landfill.

Lift is a series of one or more landfill cells forming a section of landfilled waste that extends horizontally across the landfill.

Medical waste is any waste generated by hospitals, clinics, nursing homes, doctor's offices, medical laboratories, research facilities and veterinarians, which are infectious or potentially infectious;

Operating Plan consists of drawings, descriptions and other documents regarding the operation of the landfill, placement of waste, building daily cells and lifts, leachate management, landfill gas management and all other functions related to the operation of the landfill.

Operator is the person or organisation responsible for the operation of the landfill. The operator may be the owner, another public agency or private contractor.

Owner is the person or organisation that owns the property and/or facilities that constitute the landfill

Perimeter drains are open ditches surrounding the landfill installed to prevent surface water from entering the landfill.

Recycling is the sorting, processing, and transportation of solid waste materials, products or containers for the purpose of remanufacture or reuse.

Scavenging is the unauthorised separation of solid waste for recyclable materials and food for human consumption.

Solid Waste is waste of a solid nature generated by a person, business or industry.

Solid Waste Management facility is any facility used for the transportation, processing or disposal of solid waste, and includes transfer stations, recycling facilities, composting facilities, waste incinerators, and sanitary landfills.

Sorting is the authorised separation of solid waste materials for the purpose of recycling or disposal, either at the source of generation or at a solid waste management facility.

Special waste is a non-hazardous waste, which due to its nature requires special or separate handling at a sanitary landfill. Special wastes include but are not limited to tires, asbestos, demolition waste, industrial sludges of a non-hazardous nature, paper mill sludge, olive oil waste, abattoir wastes and petroleum waste oil.

Surface water is all water in or coming from a water source, which is found on the surface of the ground, excluding water under the surface of the ground and seawater.

Transfer Station is a facility that receives solid waste from collection vehicles and reloads that waste into larger vehicles for transfer to a disposal or processing facility.

Vectors are birds, insects, and rodents capable of carrying disease-causing bacteria, viruses or fungi from one host to another.

Water Balance is a method for determining the potential for significant leachate generation, which includes climatic conditions (rainfall and evaporation) and site condition.

Working area is the area of the landfill where waste is unloaded, compacted and covered. It generally includes adequate space for several trucks to unload at the same time, for waste compaction and storage of cover soil.

ABBREVIATIONS

AP	Action Plan
APIG	Action Plan Implementation Group
CBD	Central Business District
CEC	Committee for Environmental Co-ordination
CONNEPP	Consultative National Environmental Policy Process
DEAT	Department of Environmental Affairs and Tourism
DFA	Development Facilitation Act 67 of 1995
DME	Department of Minerals and Energy
DTL	Departmental Task Leader
DWAF	Department of Water Affairs and Forestry
ECA	Environment Conservation Act, Act No. 73 of 1989
IDP	Integrated Development Plan
IP&WM	Integrated Pollution and Waste Management
IWM	Integrated Waste Management
IWMP	Integrated Waste Management Plan
LDO	Land Development Objectives
LUPO	Land Use Planning Ordinance
LGTA	Local Government Transition Act 209 of 1993
LFA	Logical Framework Analysis
NEAF	National Environmental Advisory Framework
NEMA	National Environmental Management Act, Act No. 107 of 1998
NWMS	National Waste Management Strategy
OLGA	Organised Local Government Act 52 of 1997
PMG	Project Management Group
PPA	Physical Planning Act 125 of 1991
PSC	Project Steering Committee

SECTION 1:
INTRODUCTION

1 INTRODUCTION

The Pixley Ka Seme District Municipality appointed KV3 Engineers to assist with the compilation of an Integrated Waste Management Plan (IWMP) for the Waste Management Division of the Siyathemba Municipality. As a requirement of the National Waste Management Strategy (NWMS) and the IDP Process all Municipalities are faced with the obligation to compile such a plan by end 2004 but at present many municipalities are still in the process of compiling an IWMP.

The compilation of this IWMP will be done in line with the Draft Starter Document for Integrated Waste Management Planning in South Africa made available by DEAT. The draft process of compiling the IWMP consisted of two phases. The Status Quo for Phase 1 consisted of an assessment of the current status of waste collection systems and existing disposal sites, service delivery capacity and a needs analysis for each of these aspects.

The second phase will comprise the compilation of the IWMP. The Objectives and Goals identified will be included in this phase, with alternatives for obtaining these being considered and evaluated on a high level thereafter. Based on the preferred options selected for implementation a programme was developed and cost estimates compiled to facilitate inclusion of the plan into the IDP.

SECTION 2:

BACKGROUND

2 BACKGROUND

2.1 GENERAL

The Siyathemba Municipality (SM) is situated in the Northern Cape and forms part of the Pixley Ka Seme District Municipality that also includes the Ubuntu, Umsobomvu, Emthanjeni, Renosterberg, Thembilihle, Siyancuma and Kareeberg Local Municipalities. The total demarcated municipal area serviced by the SM covers approximately 8251 km^2. The area has a low rainfall, mainly in the summer months. As a result of the scarcity of rainfall, with the exception of the small stock farming, all economic activities in the region are concentrated around the Orange River. The Municipal Main offices are situated in Prieska, with Niekerkshoop and Marydale forming the other major towns.

According to information from the 2007/2008 Integrated Development Plan for Siyathemba Municipality, the total population of the Siyathemba Municipality is 17 513 people. , of which most of the Demographic Distribution is as follows:

Settlement type	Population (2007)
Prieska (urban)	10 858
Marydale (urban)	2 101
Niekerkshoop (urban)	1 926
Siyathemba Farms (rural)	2 628
Total	17 513

According to the latest census (2001), the area has a total of 4180 households (Prieska – 62%, Marydale – 12%, Niekerkshoop – 11% and the Farms 15%)

The natural population growth for the Northern Cape is probably in the region of 1.5 – 2.0% annually. Because there is an overall outwards migration of people from the Northern Cape to other parts of South Africa, the actual population growth for the Northern Cape, and also for Siyathemba Municipality, was estimated to be in the region of 1,0% per year.

The SM will continue to experience population growth despite an increase in the number of HIV/Aids infections, whereas the farmland areas show a typical pattern of depopulation due to urban migration.

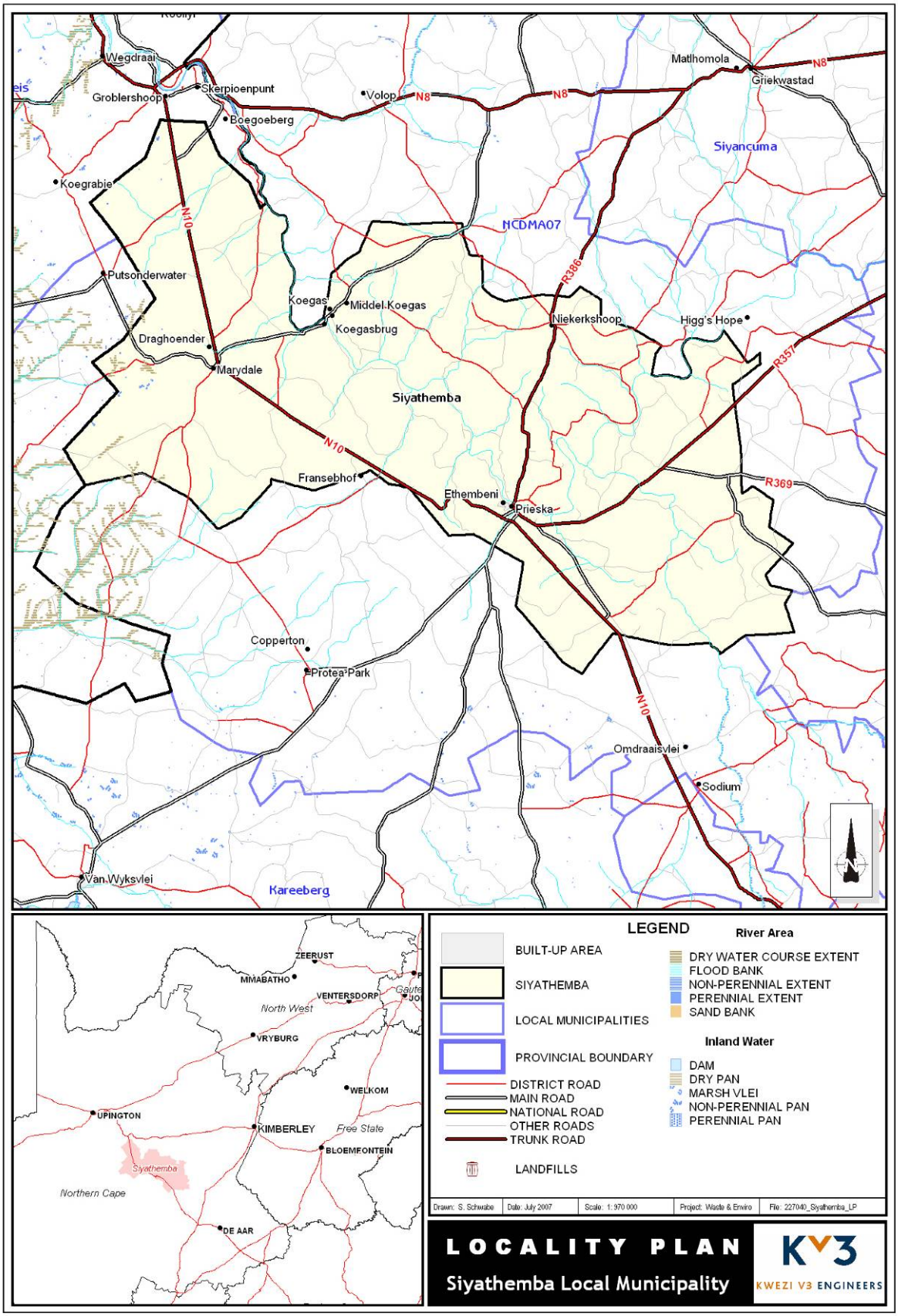
2.2 STUDY AREA

The following towns and areas formed part of this study:

Urban areas:

- Prieska
- Niekerkshoop
- Marydale

The entire study area is shown on the following map:


Wegdraai
Groblershoop
Skerpioenpunt
Boegoeberg
Volop
N8
Matlhomola
Griekwastad
Siyancuma
Koegrabie
N10
NCDMA07
R386
Putsonderwater
Koegas
Middel Koegas
Koegasbrug
Niekerkshoop
Higg's Hope
Draghoender
Marydale
R357
Siyathemba
N10
Fransebhof
Ethembeni
Prieska
R369
Copperton
Protea Park
N10
Omdraaisvlei
Sodium
Van Wyksvlei
Kareeberg
N
ZEERUST
MMABATHO
VENTERSDORP
North West
VRYBURG
WELKOM
UPINGTON
KIMBERLEY
Free State
BLOEMFONTEIN
Siyathemba
Northern Cape
DE AAR
LEGEND
BUILT-UP AREA
SIYATHEMBA
LOCAL MUNICIPALITIES
PROVINCIAL BOUNDARY
DISTRICT ROAD
MAIN ROAD
NATIONAL ROAD
OTHER ROADS
TRUNK ROAD
LANDFILLS
River Area
DRY WATER COURSE EXTENT
FLOOD BANK
NON-PERENNIAL EXTENT
PERENNIAL EXTENT
SAND BANK
Inland Water
DAM
DRY PAN
MARSH VLEI
NON-PERENNIAL PAN
PERENNIAL PAN
Drawn: S. Schwabe
Date: July 2007
Scale: 1:970 000
Project: Waste & Enviro
File: 227040_Siyathemba_LP
LOCALITY PLAN
Siyathemba Local Municipality
KWEZI V3 ENGINEERS

2.3 LEGISLATIVE FRAMEWORK

Following is a short summary of all the relevant legislation pertaining to waste management.

The South African Constitution (Act 108 of 1996) is the supreme law of the land. All law, including environmental waste management planning must comply with the Constitution.

The Constitution states that the people of South Africa have the right to an environment that is not detrimental to human health, and imposes a duty on the state to promulgate legislation and to implement policies to ensure that this right is upheld. All departments of state or administration in the national, provincial or local levels of government have similar obligations. The principles of co-governance are also set out in the Constitution and the roles and responsibilities of the three levels of government are defined.

According to the Constitution, responsibility for waste management functions is to be devolved to the lowest possible level of government. Local government therefore is assigned the responsibility for refuse removal, refuse dumps and solid waste disposal. Provincial government has the exclusive responsibility to ensure that local government carries out these functions effectively.

In addition to the Constitution, a number of government policies and statutes are relevant to waste management at the local government level, which includes the following:

- National Environmental Management Act 107 of 1998
- National Environmental Management: Waste Management Bill, 2007
- Environment Conservation Act 73 of 1989
- Local Government Transition Act 209 of 1993
- Municipal Demarcation Act 27 of 1998
- Municipal Structures Act 117 of 1998
- Municipal Systems Act 32 of 2000
- The Development Facilitation Act 67 of 1995
- The Physical Planning Act 125 of 1991
- National Environmental Management: Air Quality Act of 2004
- National Water Act 36 of 1998
- National Health Act 61 of 2003

- White Paper on Environmental Management Notice 749 of 1998
- White Paper on Integrated Pollution and Waste Management for South Africa, Notice 227 of 2000
- Minimum Requirements for Waste Disposal by Landfill, 2nd edition, 1998
- Minimum Requirements for the Handling and Disposal of Hazardous Waste, 2nd Edition, 1998
- Minimum Requirements for Monitoring at Waste Management Facilities, 2nd edition, 1998
- National Waste Management Strategy and Action Plans.
- Relevant Provincial Legislation
- Local government by-laws on waste management.

2.3.1 NATIONAL ENVIRONMENTAL MANAGEMENT ACT 107 OF 1998

The National Environmental Management Act (NEMA) provides for co-operative governance by establishing principles and procedures for decision-makers on matters affecting the environment. An important function of the Act is to serve as an enabling Act for the promulgation of legislation to effectively address integrated environmental management. Some of the principles in the Act are – Accountability; Affordability; Cradle to Grave Management; Equity; Integration; Open Information; Polluter Pays; Subsidiary; Waste Avoidance and Minimisation; Co-operative Governance; Sustainable Development; and Environmental Protection and Justice.

Chapter 2 makes provision for the establishment of the Committee for Environmental Co-ordination (CEC). The objective of the committee is to promote the integration and co-ordination of environmental functions by the relevant organs of state and in particular to promote the achievement of the purpose and objectives of environmental implementation plans and environmental management plans.

Chapter 3 requires that national government departments that have waste management responsibilities and every province must develop environmental implementation plans (EIPs) every four years and an environmental management plan (EMP). Local government is obliged to exercise its responsibilities in accordance with these plans and to report annually within four months from the end of its financial year on implementation of the environmental management plan or environmental implementation plan. Provincial government must ensure that municipalities adhere to the relevant environmental implementation and management plans within its province, as well as the principles in the preparation of any policy, programme or plan, including the establishment of Integrated Development Plans (IDPs) and Land Development Objectives (LDOs).

Chapter 7 imposes a duty of care in respect of pollution and environmental degradation. Any person who has caused significant pollution or degradation of the environment must take steps to stop or minimise the pollution. Where an incident occurs that is potentially detrimental to the environment, the person who is responsible for the incident or the employer must, within 14 days of the incident, report to the Director-General, provincial head of department and municipality. The relevant authority may specify measures to address the problem and remediate the area within 7 days. The Acts also attach consequences for breaching the duty of care, namely that government authorities are empowered to issue directions and to remediate the situation and recover costs where the directions are not complied with.

Chapter 8 provides that the Minister and every MEC and municipality may enter into an environmental management co-operation agreement with any person or community for the purpose of promoting compliance with the principals laid down in NEMA. Environmental Co-operation Agreements may contain an undertaking by the person or community concerned to improve the standards laid down by law for the protection of the environment and a set of measurable targets and a timeframe for fulfilling the undertaking.

Chapter 9 allows the Minister to make model by-laws aimed at establishing measures for the management of environmental impacts of any development within the jurisdiction of the municipality, which may be adopted by the municipality as by-laws. Any municipality may request the Director-General to assist it with its preparation of by-laws on matters affecting the environment and the Director-General may not unreasonably refuse such a request. The Director-General may institute programmes to assist municipalities with the preparation of by-laws for the purposes of implementing this Act.

Section 24 and 24D of NEMA requires that an environmental impact assessment be conducted prior to the establishment of waste disposal facilities.

2.3.2 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE MANAGEMENT BILL, 2007

The National Waste Management Bill, gazetted in January 2007, will entrench best practices in waste management into law, replacing the outdated and unsustainable “end of pipe” approach with a new, more environmentally responsible and sustainable approach.

The Bill deals with minimising the consumption of natural resources, waste generation, recycling, waste disposal, prevention of pollution, promotion of waste services, remedying land degradation, and achieving integrated waste management reporting and planning.

The Bill was available for comment until 12 April 2007. The aim of this process was to incorporate public input before submitting the Bill to Parliament in July for approval and promulgation.

2.3.3 ENVIRONMENT CONSERVATION ACT 73 OF 1989

The object of the Environment Conservation Act is to provide for the effective protection and controlled utilisation of the environment. The ECA was amended in 2005 (Environment Conservation Amendment Act 50 of 2003) to provide for the transfer of the administration of waste disposal sites from the Minister of Water Affairs and Forestry to the Minister of Environmental Affairs and Tourism. This transfer was enacted with the publishment of Government Gazette No 28346 to be implemented as from 3 January 2006. Any person who intends to establish or operate a waste disposal site must apply for a permit from the Minister of Environmental Affairs and Tourism. The permit is made subject to a number of conditions, which *inter alia* pertain to the design, construction, monitoring and closure of a waste disposal site.

Waste is defined in ECA to mean ”any matter, whether gaseous, liquid or solid or any combination thereof, which is from time to time designated by the Minister by notice in the *Gazette* as an undesirable or superfluous by-product, emission, residue or remainder of any process or activity”. Waste products may originate from domestic, commercial or industrial activities. In a subsequent regulation (GN 1986 0f 24 August 1990) the Minister excluded the following wastes from those covered by ECA, i.e. sewage sludge, radioactive waste, building rubble, as well as mining, metallurgical and power generation wastes. These wastes are dealt with under other legislation. The Minister of Environmental Affairs and Tourism however amended the definition of waste to include building rubble used for filling or levelling purposes on 3 February 2003.

In terms of the Section 19 of the Act, it is an offence to litter on any place to which the public has access and the person or authority in charge of the area must provide containers for the discarding of litter. In addition, every authority in control of any place must remove the litter within a reasonable time. Provision is made for the appointment of inspectors to investigate compliance with the Act. In terms of Section 24A of the Environment Conservation Act, a competent authority may make regulations with regard to the control of the dumping of litter.

Section 20 deals with waste management, including with the establishment and operation of waste disposal sites. A disposal site is any site used for the accumulation of waste for the purpose of disposal or treatment. Such sites may only be operated under a permit issued by the Minister of Environmental Affairs and Tourism and may be subject to specified conditions. The DWAF Minimum Requirements documents form the basis for the permitting process and may be included as permit conditions, thereby becoming legally binding on the permit holder. The permit holder is generally required to operate, maintain and attend to the closure of a waste disposal site in compliance with the permit conditions, as well as in accordance with the guidelines set out in the Minimum Requirements documents.

2.3.4 MUNICIPAL DEMARCATION ACT 27 OF 1998

The Municipal Demarcation Act 27 of 1998 provides criteria and procedures for the determination of municipal boundaries by an independent authority. In terms of the Act, the Municipal Demarcation Board is established to determine municipal boundaries.

Section 24 provides that when demarcating a municipal boundary, the Board must aim to establish an area that would enable the municipality to fulfil its Constitutional obligations, including the provision of services in an equitable and sustainable manner, the promotion of social and economic development and the promotion of a safe and healthy environment. The tax base must also be as inclusive as possible of users of municipal services in the municipality.

2.3.5 ORGANISED LOCAL GOVERNMENT ACT 52 OF 1997

The Organised Local Government Act 52 of 1997 provides for the recognition of national and provincial organisations representing the different categories of municipalities and determines various procedures concerning local government, including procedures by which local government may consult with national and provincial government.

2.3.6 MUNICIPAL STRUCTURES ACT 117 OF 1998

The main object of the Municipal Structures Act 117 of 1998 is to provide for the establishment of municipalities in accordance with the requirements relating to categories and types of municipality and to provide for an appropriate division of functions and powers between categories of municipality. It is one of a set of legislation that is aimed at the transformation of local government into a more financially sustainable and performance orientated sphere of government. The Act is aimed at creating the permanent structures mandated by the Constitution, which will replace the transitional structures created by the Local Government Transition Act. Municipalities are categorised either as A, B or C. depending on the level of development.

Chapter 5 sets out the functions and powers of the municipalities in accordance with the Constitution.

2.3.7 MUNICIPAL SYSTEMS ACT NO. 32 OF 2000

The Municipal Systems Act describes the core principles, mechanisms, and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of communities and ensure access to services that are affordable to all. Its focus is primarily on the internal systems and administration of the municipality.

The Act enables the process of decentralisation of functions through assigning powers of general competence to local Government. Municipal by-laws are regulated to achieve harmony with national and provincial legislation.

As service authorities, municipalities remain responsible for the effective delivery of services and must provide an appropriate policy and regulatory framework. This can be achieved through the most appropriate service provider, ranging from internal departmental delivery to corporatisation and joint ventures to private sector delivery options.

Performance management systems are to be developed to measure and evaluate performance in priority areas, which are to be reported annually to citizens and other spheres of government.

The process to be followed in planning, drafting and adopting the Integrated Development Plan is set out.

2.3.8 THE DEVELOPMENT FACILITATION ACT 67 OF 1995

The Development Facilitation Act 67 of 1995 sets out a planning and land development system, which ensures that national, provincial, and local government policies are implemented.

Section 28 describes the requirements for Land Development Objectives, which must be developed by each local authority. One of the objectives of Land Development Objectives is to create a new system of planning that encourages sustained utilisation of the environment, particularly with regard to the environmental consequences of developments.

Municipalities are encouraged to co-operate in order to develop the capacity of each municipality to exercise its powers and duties and manage its affairs.

2.3.9 THE PHYSICAL PLANNING ACT 125 OF 1991

The objective of the Physical Planning Act 125 of 1991 is to provide for the division of the country into regions and to promote regional development. Policy plans consist of broad guidelines for the future physical development of the area and restrictions are placed on the use of land in the area to which the plan relates. Local authorities are required to develop urban structure plans for their areas of jurisdiction.

2.3.10 NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT OF 2004

The purpose of the National Environmental Management: Air Quality Act of 2004 is to provide for the prevention of the pollution of the atmosphere.

The Act sets out the procedure for the permitting of Scheduled Processes, which includes waste incineration processes. A registration certificate is a mandatory requirement and the Act prohibits any person from carrying on a Scheduled Process unless that person is the holder of a current registration certificate. A current registration certificate is granted after compliance with the conditions of a provisional registration certificate and the requirements of the Department of Environmental Affairs and Tourism to whom this power has been delegated. The current registration certificate also is issued subject to conditions. These include the condition that all appliances used for preventing or reducing to a minimum the escape into the atmosphere of noxious or offensive gases shall be properly operated and maintained and that the best practice means for achieving this are implemented.

The Act also provides for the control and regulation of smoke pollution arising from any fuel-burning appliance.

The Act also deals with dust control. Whenever dust originating on any land in a dust controlled area is causing a nuisance to persons residing or present in the vicinity of that land, the owner or occupier may be required to take the prescribed steps or adopt the “best practicable means” for the abatement the dust.

2.3.11 NATIONAL WATER ACT 36 OF 1998

The National Water Act contains a number of provisions that impact on waste management, including the disposing of waste in a manner, which detrimentally impacts on a water resource and the discharge of waste into a water resource. The Act allows the Minister to make regulations for:

- Prescribing waste standards, which specify the quantity, quality and temperature of waste that may be discharged or deposited into or allowed to enter a water resource.

- Prescribe the outcome or effect, which must be achieved through management practices for the treatment of waste before it is discharged or deposited into or allowed to enter a water resource.

- Requiring that waste discharged or deposited into or allowed to enter a water resource be monitored and analysed according to prescribed mechanisms.

2.3.12 NATIONAL HEALTH ACT 61 OF 2003

The National Health Act 61 of 2003 provides measures for the promotion of health, for the rendering of health services and defines duties of certain authorities which render health services in the Republic

The duties and powers of local authorities are set out in the Act. It provides that every local government is obliged to take measures to maintain its district in a clean and hygienic condition and to prevent the occurrence of any nuisance, unhygienic or offensive condition or any other condition, which could be of danger to the health of any person. A "nuisance" includes any accumulation of refuse or other matter that is offensive or is injurious or dangerous to health. The local government is obliged to abate the nuisance or remedy the condition and to prevent the pollution of any water intended for the use of the inhabitants of its district.

2.3.13 WHITE PAPER ON ENVIRONMENTAL MANAGEMENT NOTICE 749 OF 1998

The White Paper on Environmental Management was published in 1998. This policy sets out government's objectives in relation to environmental management, how it intends to achieve its objectives, and to guide government agencies and organs of state in developing strategies to meet their objectives.

The policy document is an overarching policy framework that refers to all government institutions and to all activities that impact on the environment. The policy states that government will allocate functions to the institutions and spheres of government that can most effectively achieve the objectives of sustainable development and integrated environmental management. This would include the allocation if certain functions to the municipal sphere of government.

Where appropriate, provincial and local government are to develop their own legislation and implementation strategies to address their specific needs and conditions within the framework of the policy.

2.3.14 WHITE PAPER ON INTEGRATED POLLUTION AND WASTE MANAGEMENT FOR SOUTH AFRICA, NOTICE 227 OF 2000

The White Paper of Integrated Pollution and Waste Management was published in March 2000 and represents formal government policy regarding integrated pollution and waste management. Integrated pollution and waste management is defined as a holistic and integrated system and process of management aimed at pollution prevention and minimisation at source, managing the impact of pollution and waste on the receiving environment and remediating damaged environments. Waste management is to be implemented in a holistic and integrated manner and

extend over the entire waste cycle from cradle-to-grave and will include the generation, storage, collection, transportation, treatment and disposal of waste.

The overarching goal reflected in the policy is integrated pollution and waste management, with the intention being to move away from fragmented and uncoordinated pollution control and waste management towards integrated pollution and waste management as well as waste minimisation. Within this framework of the overarching goal, the following strategic goals apply:

1. Effective institutional framework and legislation;

2. Pollution and waste minimisation, impact management and remediation;

3. Holistic and integrated planning – the intention is to develop mechanisms to ensure that integrated pollution and waste management considerations are integrated into the development of government policies, strategies and programmes as well as all spatial and economic development planning processes and in all economic activity. The strategic mechanisms include the following:

- The incorporation of integrated environmental management principles and methodologies in spatial development planning as it relates to pollution and waste management;
- Making timeous and appropriate provision for adequate waste disposal facilities;
- Developing management instruments and mechanisms for the integration of pollution and waste management concerns in development planning and land allocation;
- Developing appropriate and agreed indicators to measure performance for inclusion in EIPs and EMPs as provided for in the National Environmental Management Act;
- Participation and partnerships in integrated pollution and waste management governance;
- Empowerment and education in integrated pollution and waste management;
- Information management; and
- International co-operation.

2.3.15 DWAF MINIMUM REQUIREMENTS FOR LANDFILL, 2ND EDITION, 1998

The Minimum Requirements provide applicable waste management standards or specifications that must be met, as well as providing a point of departure against which environmentally acceptable waste disposal practices can be assessed. The objectives of setting Minimum Requirements are to:

- Prevent water pollution and to ensure sustained fitness for use of South Africa's water resources.

- Attain and maintain minimum waste management standards in order to protect human health and the environment form the possible harmful effects caused by the handling, treatment, storage and disposal of waste.

- Effectively administer and provide a systematic and nationally uniform approach to the waste disposal process.

- Endeavour to make South African waste management practices internationally acceptable.

- Before a waste disposal site permit is issued, adherence to the Minimum Requirement conditions will be required from the permit applicant. The Minimum Requirements promote the hierarchical approach to waste management, as well as a holistic approach to the environment.

2.3.16 NATIONAL WASTE MANAGEMENT STRATEGY AND ACTION PLANS.

The overall objective of this strategy is to reduce the generation of waste and the environmental impact of all forms of waste and thereby ensure that the socio-economic development of South Africa, the health of the people and the quality of its environmental resources are no longer adversely affected by uncontrolled and uncoordinated waste management. The internationally accepted waste hierarchical approach was adopted of waste prevention/minimisation, recycle/reuse, treatment and finally disposal.

The strategy outlines the functions and responsibilities of the three levels of government and where possible, firm plans and targets are specified. During the development of the strategy a number of priority strategic initiatives were identified which were categorised into short-term (by the year 2004), medium-term (by the year 2008) and long-term (by the year 2012) initiatives. Action plans have been developed for the short-term initiatives for integrated waste management planning, a waste information system, waste minimisation and recycling, general waste collection, waste treatment and disposal, and capacity building, education, awareness and communication. A

logical framework analysis approach was adopted to develop the Action Plans that analysed the problems, stakeholders, and the risks to successful implementation followed by the development of outputs, activities, inputs and assumptions, as well as a proposed allocation of functions, roles, and responsibilities of the three levels of government.

The roles and responsibilities in terms of the NWMS for local government include:

- *Integrated waste management planning*: Local government will be responsible for the compilation of general waste management plans for submission to provincial government.
- *Waste information system*: Local government will be responsible for data collection.
- *Waste minimisation*: Local government will implement and enforce appropriate national waste minimisation initiatives and promote the development of voluntary partnerships with industry.
- *Recycling*: Local government are to establish recycling centres and/or facilitate community initiatives.
- *Waste collection and transportation*: Local government are to improve service delivery. Private public partnerships to assist service delivery are encouraged.
- *Waste disposal*: Local government is to take responsibility for the establishment and management of landfill sites, and to promote development of regionally based facilities. Formalising and controlling of scavenging is the responsibility of the permit holder.

2.3.17 POLOKWANE WASTE SUMMIT DECLARATION

During September 2001 a national waste summit was held at Polokwane, in the Northern Province. It was attended by all stakeholder groupings in the waste field in order to jointly chart a way forward in terms of waste management. The resultant Polokwane Declaration includes a vision and goal for the management of all waste, i.e. domestic, commercial and industrial:

Vision - To implement a waste management system, which contributes to sustainable development and a measurable improvement in the quality of life by harnessing the energy and commitment of all South Africans for the effective reduction of waste.

Goals - To reduce waste generation and disposal by 25% and 50% respectively by 2012 and develop a plan for zero waste by 2022

The Polokwane Declaration has significant implications for local government. In order to move towards the goal it will be necessary for government and other stakeholders to engage more closely toward the achievement of this goal in a realistic and practical manner. The key actions in the Polokwane Declaration that impact on local government include the following:

- Implement the NWMS.
- Develop and implement legislative and regulatory framework.
- Waste reduction and recycling.
- Develop waste information and monitoring systems.

2.4 GENERAL

It must be noted that some of the above Acts and Regulations are currently (2007) under review for changes and / or additions, and some are due for complete replacement with new Acts soon.

SECTION 3:

STUDY AREA AND STATUS QUO

3 STUDY AREA AND STATUS QUO

3.1 INTRODUCTION

The Siyathemba Municipality currently provides services to the following towns:

- Prieska
- Niekerkshoop
- Marydale

The status quo study will assess the municipal area with consideration to the various service categories as well as evaluate the service delivery in each of the towns in the Municipality. The service categories that are taken into consideration can be summarised as follows:

- Refuse Removal: Residential, Commercial, Industrial, Garden Refuse and Builders' Rubble
- Street and ablution cleaning
- Landfill Sites, Transfer Stations and Bulk Containers

The Status Quo investigation of the waste management section considered each of these aspects of service delivery by the Siyathemba Municipality as shown in the following table.

SERVICE CATEGORY	SERVICE ASPECTS CONSIDERED
Refuse removal	Waste generation, collection system, collection equipment, personnel, residential, commercial, garden refuse and builders' rubble, medical and hazardous waste, mining industry, obvious needs.
Street Cleansing	Regularity of service, equipment, personnel, obvious needs
Landfill Sites, Transfer Stations and Bulk Containers	Waste generation, collection and transportation, personnel, equipment, landfill operation, transfer stations, garden refuse sites, obvious needs

In addition to this existing structure, the status quo study also considered planned developments, service extensions and any planned projects that have been identified in the IDP.

3.2 SIYATHEMBA MUNICIPALITY

3.2.1 SERVICE AREA AND REFUSE COLLECTION

The waste service delivery of the Siyathemba Municipality is co-ordinated from Prieska. A regular waste removal service is provided to all the urban areas in the Municipality. The farming areas of the Siyathemba Municipality do not receive a waste removal service. The provision of such a service is at the moment not envisaged by the Municipality. There are also no private waste contractors active within the municipal area.

The service delivery for the various towns is managed from the regional service delivery centres due to the distance of the towns from each other. Each town is therefore responsible for the day to day management of refuse collection.

The Table below gives the areas that are serviced and the frequency of the waste removal service.

AREA	FREQUENCY OF SERVICE (days per week)
Prieska:	
Residential	**1**
Business	**1**
Niekerkshoop:	
Residential	**1**
Business	**1**
Marydale:	
Residential	**1**
Business	**1**

Street sweeping is done in the CBD's of areas of Prieska, Niekerkshoop and Marydale. There is no street sweeping in the residential areas, the residential areas will only be cleaned if it is necessary to do so.

The following table gives the details of the area and frequency of service for street sweeping.

AREA	FREQUENCY OF SERVICE
Prieska	**Monday - Friday**
Niekerkshoop	**Monday - Friday**
Marydale	**Monday - Friday**

3.2.1.1 WASTE RECEPTACLES

The Siyathemba Municipality utilises a black refuse bag system. Residents have to buy their own refuse bags. The Municipality accepts any number of bags per household, so there is no specific limit. The bags are placed on the curb outside the house and collected from there.

3.2.1.2 NEW DEVELOPMENTS

New residential and commercial developments are planned for the Siyathemba Municipality where refuse collection service will have to be rendered in future. These include 43 low income RDP houses in Niekerkshoop; 43 low income RDP houses in Marydale; 114 low income RDP houses in Prieska. After completion of these houses in Prieska, another additional 250 low income RDP houses is planned for development in Prieska.

The new developments still need to be incorporated into the refuse collection service.

3.2.2 MUNICIPAL BY-LAWS PERTAINING TO WASTE

The Siyathemba Municipality does not have a set of by-laws which comprehensively address the Council's responsibility for the removal of refuse, management of disposal facilities, waste minimisation, illegal activities, payment of fees and penalties.

3.2.3 WASTE GENERATION RATES

3.2.3.1 POPULATION GROWTH RATES

The effective annual population growth rate for the SM is in the region of 1% per annum.

3.2.3.2 WASTE GENERATION

The landfill sites in the Municipal area do not have weighbridges and therefore the quantities of waste disposed of are not exactly known. The daily tonnages of waste generated were obtained by applying per capita waste generation rates to the figures for the population served. These rates vary with the socio-economic standing of the population, from 0.3 kg per capita per day in the poor areas, to 1.0 kg per capita per day in the affluent areas.

The mathematical estimation of the amount of waste generated within the municipal area is indicated in the table below:

AREA	2007 POPULATION	GENERATION RATE (KG/P/D)	GENERATED WEIGHT (TONS/WEEK)	GENERATED WEIGHT (TONS/ANNUM)
Prieska	**10 858**	**1.0**	**76**	**3925**
Niekerkshoop	**1 926**	**0.3**	**4**	**208**
Marydale	**2 101**	**0.3**	**4.4**	**229**

The waste collected in Prieska is transported to the existing permitted Prieska Landfill site. The waste collected in Marydale is disposed of at the existing unauthorised Marydale Landfill site, while all waste collected at Niekerkshoop is disposed of at the existing unauthorised Niekerkshoop Landfill site.

3.2.3.3 WASTE CHARACTERISTICS

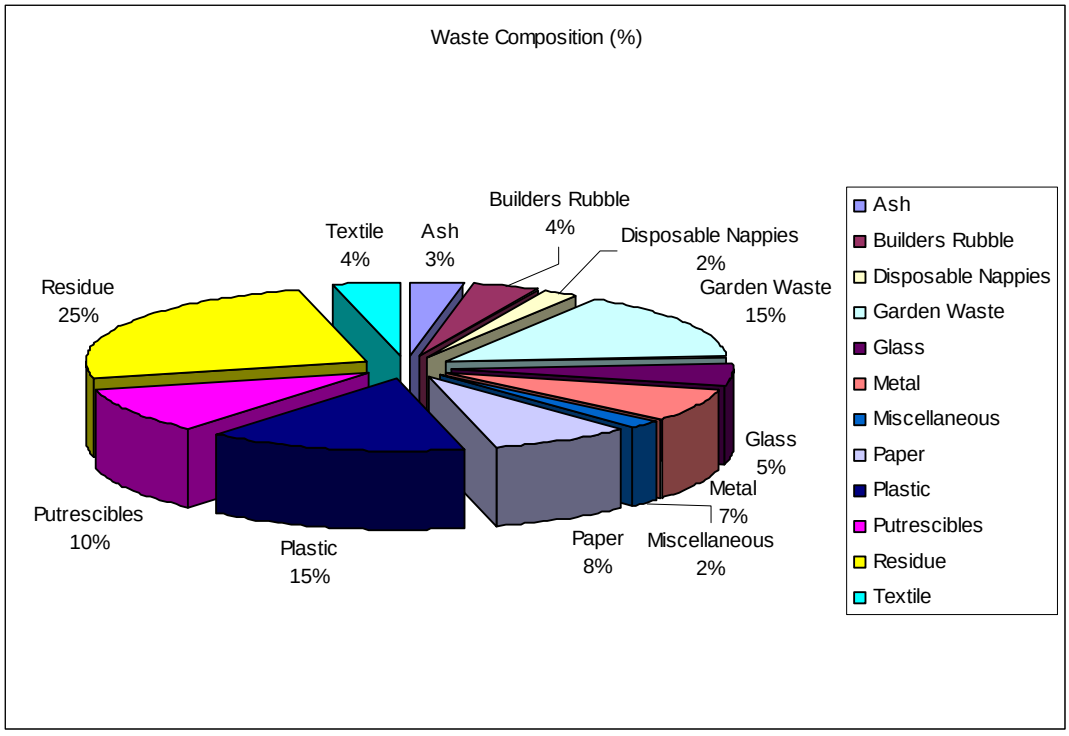
For the composition of the waste stream the waste body was divided into 13 categories that include both recyclable and non-recyclable material. They included plastic bottles, plastic film, paper separated by grade such as newspaper and inserts versus higher quality office paper, glass, organic material and ash. It must be noted that the waste on the landfill sites is burned on a regular basis, reducing the quantity of papers and plastics. It further makes the distinction between ash and organics extremely difficult.

The Table Below indicate the waste composition as a percentage of the sample. It should however be noted that the organic percentage is probably lower than expected due to the regular burning.

The waste on the landfill site is not covered regularly on all the landfills and the waste body present represents a relatively long disposal period.

Waste Stream Composition	Percentage
Ash	3
Builders Rubble	4
Disposable Nappies	2
Garden Waste	15
Glass	5
Metal	7
Miscellaneous	2
Paper	8
Plastic	15
Putrescibles	10
Residue	25
Textile	4
Total	100

The graph below provides a graphic presentation of the above table.



3.2.4 WASTE MINIMISATION STRATEGIES

There are currently no formal Municipal driven waste minimisation activities taking place in the Siyathemba Municipality. However, the municipality is assisting one individual to recycle glass bottles from the landfills.

The Municipality is also currently not offering any recycling incentives to private people or businesses.

3.2.5 ILLEGAL DUMPING

Illegal dumping of waste is common in several of the outlying and township areas. The Municipality has to collect this waste at an unnecessary cost. The Siyathemba Municipality has recognised the need for education of the people regarding this practice; however nothing has yet been implemented.

The Municipality is also experiencing dumping of waste in areas not demarcated for waste disposal.

3.2.6 GARDEN REFUSE

In all the towns within the municipal area, small amounts of garden waste are collected together with general household waste. Disposal of garden waste by private persons are free of charge at the various disposal sites.

The amount of garden waste generated within the Municipal area is not known due to the fact that the Municipality has no control over the disposal of garden waste. Waste volumes are also not recorded at the entrances to the disposal sites.

3.2.7 PERSONNEL

The Siyathemba Municipality renders its own waste collection and street cleaning service.

The waste service is rendered together with other municipal services in the three towns with the largest contingent of workers present in Prieska. The Municipality is experiencing shortages of labour, specifically supervision and labour at the various landfills. They are also experiencing a shortage in personnel working in technical services and assistants to those technicians.

3.2.8 EQUIPMENT

The equipment that is utilised by the Siyathemba Municipality is given below in the Table below.

REG NUMBER	MODEL	VEHICLE DESCRIPTION	CONDITION*	BASED
DBR 984 NC	1985	Isuzu Tipper truck (6m^3)	Bad	Prieska
BFN 334 NC	1993	Tractor Trailer	Fair	Niekerkshoop
BFD 423 NC	1977	Tractor Trailer	Bad	Marydale

- Note that the indicated **VEHICLE CONDITION** is a subjective as assessment of the vehicles and no mechanical assessment of the vehicles had been conducted for this study.

Tipper truck in Prieska

Trailer in Marydale

Tractor in Marydale

Tractor trailer in Niekerkshoop

The Siyathemba Municipality has a few vehicles that are old and are due for replacement. The tipper truck utilised in Prieska for example are in need of replacement. The Municipality is responsible for the maintenance of their own vehicles.

3.2.9 LANDFILL

The Siyathemba Municipality has three landfill sites namely Prieska, Marydale and Niekerkshoop. All three the sites are managed by the Municipality.

The landfill in **Prieska** is a Class G:C:B$^-$ permitted site. The site has approximately enough airspace for the next 20 years. The site is not well managed due to certain financial and personnel constraints. The waste is not covered on a regular basis and is burned once disposed of. The site is not fenced and access is not controlled. No record-keeping takes place at the entrance to the site. Wind-blown litter is a serious problem at the site. There was one employee stationed at the site.

Position of site:	4 km south of town.
Permit:	Yes
Year issued:	14/4/2003
Classification of site:	Class G:C:B-
Type of Operation (end – tip, trench, cell):	There is only a large area excavated for dumping purposes. Waste is disposed hap-hazardly and burned.
Estimated size of site:	Approximately 2 ha.
Estimated remaining life of site:	The remaining life of the site is 20 years
Separation of fresh and contaminated water:	None in place.
Groundwater monitoring:	Not required in permit
Volumes per day, week or month:	It is estimated that the site receives approximately 76 tonnes per week.
Is cover material available?	No
Is the drainage sufficient?	No
Is there access control?	No

Is the site fenced?	No.
Does the site have a sufficient buffer zone?	Yes. No houses are situated in the proximity of the site.
Type of equipment utilised on site:	None
Operating hours:	7h30 to 16h30
Estimating cost for closure:	No estimate regarding closure exists. Due to the extended life of the site the savings plan is not in place yet.
Saving plan for closure:	

Non-working incinerator at Prieska disposal site.

Waste burned at Prieska disposal site

The landfill site at **Niekerkshoop** is located 7 km outside town. The site is fenced (needs maintenance) but access is not controlled. The open burning of waste in a pit forms part of the operational procedure for the site. The waste is not covered on a daily basis due to the absence of proper landfill equipment. The operation of the site is not up to an acceptable standard.

Position of site:	7 km east of town
Permit:	No
Year issued:	N/A
Classification of site:	Not permitted - no classification.
Type of Operation (end – tip, trench, cell):	Site is an open pit where waste is burned indiscriminately.
Estimated size of site:	Approximately 2.5 ha.
Estimated remaining life of site:	20 years
Separation of fresh and contaminated water:	None in place.
Groundwater monitoring:	No groundwater monitoring takes place.
Volumes per day, week or month:	It is estimated that the site receives approximately 4 tonnes per week.
Is cover material available?	No
Is the drainage sufficient?	No
Is there access control?	No
Is the site fenced?	Yes, however the existing fence needs some maintenance
Does the site have a sufficient buffer zone?	Yes, the site is situated some distance away form the town
Type of equipment utilised on site:	None
Operating hours:	None
Estimating cost for closure:	No estimate regarding closure exists. The Municipality must budget for the closure and rehabilitation in the near future.
Saving plan for closure:	

Waste is burned at the Niekerkshoop site	**Some scrap meal dumped at Niekerkshoop disposal site**

The **Marydale landfill site** is located 3 km north of town. The site is not fenced and access is not controlled. Wind-blown litter is also a serious problem in the vicinity of the site. There is no landfill equipment on the site and therefore covering of the waste does not occur at all. The site is not properly operated with waste being disposed of haphazardly and burned after disposal.

Position of site:	3 km North of town
Permit:	No
Year issued:	N/A
Classification of site:	Not permitted - no classification.
Type of Operation (end – tip, trench, cell):	Site is an open pit where waste is burned indiscriminately.
Estimated size of site:	Approximately 1.5 ha.
Estimated remaining life of site:	Expected to be 20 years
Separation of fresh and contaminated water:	None in place.
Groundwater monitoring:	No groundwater monitoring takes place.
Volumes per day, week or month:	4.4 tonnes/week
Is cover material available?	No

Is the drainage sufficient?	No
Is there access control?	No
Is the site fenced?	No
Does the site have a sufficient buffer zone?	Yes
Type of equipment utilised on site:	None
Operating hours:	7h30 to 16h30
Estimating cost for closure:	No estimate regarding closure exists. The Municipality must budget for the closure and rehabilitation in the near future.
Saving plan for closure:	

No access control or fence at Marydale disposal site	**Waste is burned at Marydale disposal site**

3.2.10 TRANSFER STATIONS

The Siyathemba Municipality has no transfer stations within the municipal area.

3.3 NEEDS ANALYSIS

From the Status Quo and Needs Analysis study, certain needs pertaining to the waste disposal service in the Siyathemba Municipality were identified that requires attention. These needs are summarised below.

- There are no waste minimisation strategies that have been developed. These need to be addressed and implemented.

- The new developments that are taking place in the Siyathemba Municipality must be included for the provision of a waste disposal service.

- Illegal dumping of waste is common in several of the outlying and township areas. The illegal disposal should be addressed in order to manage and minimise the illegal activities pertaining to waste disposal.

- New Municipal By-Laws should be drafted by the District Municipality (for use by the local municipalities within the District) that pertain directly to waste and issues surrounding waste management. Issues such as waste minimisation and recycling etc. should be dealt with in the By-Laws.

- The Siyathemba Municipality has a shortage of personnel, specifically with regard to the management of the disposal sites. Limited or no personnel are present at the disposal sites. Vacant posts should be filled and posts should be created for the management of the disposal sites.

- The Siyathemba Municipality has a few vehicles that are old and in poor condition that are due for replacement.

- The Niekerkshoop and Marydale disposal sites are not authorised. The process to authorise these disposal facilities should be initiated by the Municipality. The operation of these sites is not up to standard. The sites should be upgraded (properly fenced/secured, guard house with ablution) and the operations should be improved in accordance with the Minimum Requirements for Waste Disposal by Landfill document.

- The Prieska disposal site should be upgraded (fenced, guard house and ablution facility) and operated in accordance with the permit conditions for the site, as well as the Minimum Requirements for Waste Disposal by Landfill as published by the Department of Water Affairs and Forestry.

- Access should be controlled at the disposal facilities and a record should be kept of the types and volumes of waste that is being disposed of at each site.

- Municipal waste records should be kept and maintained for informed future decision-making purposes and to comply with the Government's Waste Information System requirements.

- A mitigation strategy or some form of succession planning should be developed for the expected increase in HIV-AIDS related deaths amongst personnel.

- A public awareness and education program should be implemented consisting of flyers, newspaper notices and road shows.

SECTION 4:
INDUSTRIAL AND MINING WASTE

4 INDUSTRIAL AND MINING WASTE

Industries in the area are mostly confined to light industries. The Municipality is currently not experiencing any problems with regard to the disposal of hazardous waste from industry or mining activities on the existing disposal facilities.

SECTION 5:
MEDICAL WASTE

5 MEDICAL WASTE

There are one Provincial hospital (in Prieska) and smaller medical clinics in Niekerkshoop and Marydale. The Municipality is not involved in the removal of any medical waste from these institutions. The medical waste is collected by SANUMED and incinerated and disposed of in the Free State. The Municipality does not experience any problems with medical waste at the landfill sites.

SECTION 6:
COSTS AND TARIFFS

6 TARIFFS

6.1 CURRENT TARIFF STRUCTURE

The Table below lists the tariff of charges for 2006/2007.

TARIFF OF CHARGES: CLEANSING SERVICES (WASTE MANAGEMENT)	2006/07 TARIFF (R)
Refuse per household per month per service	36.51

SECTION 7:
TRENDS AND FORECAST

7 TRENDS AND FORECAST

Decision-making and planning has to be based on sound input and data. The following trends were identified for the Siyathemba Local Municipality for population, economic growth and waste generation.

7.1 POPULATION

The Population within the Siyathemba Local Municipality is approximately 17 513. The effective annual population growth rate for the SM is in the region of 1% per annum.

7.2 ECONOMIC GROWTH

The South African GDP increased with 3.7% for 2004 – 2005, but is anticipated to increase to 5.1% for the period 2005 – 2006. Such a growth could translate into an effective increase in the waste generation growth rate. Since the focus on waste minimisation and recycling is expected to sharpen in the immediate future any minimal growth associated with economic growth will be cancelled out by the associated waste reduction that will mainly be expected from higher income groups.

7.3 WASTE GENERATION

Waste generation growth estimates should take the economic growth, population wealth as well as the population growth rate into consideration as a zero increase in population size, but a fast growing economy will result in a waste generation growth and vice versa.

The estimated waste generation models will give a prediction until the year 2014. Growth rates used were applied using Per Capita Waste Generation Figures as defined in the Minimum Requirements Documents. These growth rates do not take any recycling activities into account and is likely to be an overestimate of the actual growth in waste generation.

Siyathemba

Population Growth Rates

Area	Current Population	Population Growth	2008	2009	2010	2011	2012	2013	2014
Prieska	10858	1.00%	10966.58	11076.25	11187.01	11298.88	11411.87	11525.99	11641.25
Marydale	2101	1.00%	2122.01	2143.23	2164.66	2186.31	2208.17	2230.25	2252.56
Niekerkshoop	1926	1.00%	1945.26	1964.71	1984.36	2004.20	2024.25	2044.49	2064.93
Siyathemba Farms	2628	1.00%	2654.28	2680.82	2707.63	2734.71	2762.05	2789.67	2817.57
Total	**17513**		**17688.13**	**17865.01**	**18043.66**	**18224.10**	**18406.34**	**18590.40**	**18776.31**

Expected Waste Generation Rates (Kg/day)

Area	Current Population	Generation Rates	2008	2009	2010	2011	2012	2013	2014
Prieska	8442	1	10966.6	11076.2	11187.0	11298.9	11411.9	11526.0	11641.2
Marydale	319	0.3	636.6	643.0	649.4	655.9	662.5	669.1	675.8
Niekerkshoop	317	0.3	583.6	589.4	595.3	601.3	607.3	613.3	619.5
Siyathemba Farms	13115	0.2	530.9	536.2	541.5	546.9	552.4	557.9	563.5
Total	17513		12718	12845	12973	13103	13234	13366	13500

SECTION 8:

GOALS AND OBJECTIVES

8 GOALS AND OBJECTIVES

Seven (7) focus areas have been identified to be addressed for the compilation of an IWMP for the Siyathemba Local Municipality. Based on the Gaps and Needs identified, Goals and Objectives have been identified for each of the categories or focus areas (listed below) discussed.

8.1 DISPOSAL INFRASTRUCTURE DEVELOPMENT

This area relates to the development, upgrading and legalisation of disposal infrastructure. This includes the identification of new infrastructure required, the permitting of existing unauthorised facilities, and the upgrading of the current infrastructure as well as the improvement of management practices at the various locations.

8.2 WASTE COLLECTION INFRASTRUCTURE

The shortcomings in the available collection infrastructure will be identified. This will involve possible fleet shortages, receptacle placement and route planning.

8.3 INSTITUTIONAL CAPACITY AND HUMAN RESOURCES

This area involves the identification of human resource shortcomings and alteration to employee structures.

8.4 FINANCIAL RESOURCES

This area relates to existing and required financial structures and strategies.

8.5 DISSEMINATION OF INFORMATION/COMMUNICATION

This area covers the need for effective record keeping and the development of a Waste Information System, the sharing of available information as well as co-operation of the various stakeholders within the municipality.

8.6 MANAGEMENT OF ILLEGAL ACTIVITIES

This focus area relates to illegal dumping activities within the municipal area. This involves identification of possible illegal dumping hot spots, development of clean up and anti dumping campaigns, possible revision of bylaws as well as revision of collection strategies.

8.7 WASTE MINIMISATION

This area involves the identification of specific waste minimisation strategies, whether it be separation and collection at the source, privatisation of recycling activities, development of collection points throughout the area as well as public awareness/education strategies.

It is important to structure Goals and Objectives in accordance with the Government's strategy of waste minimisation. The official hierarchy adopted in the Government Waste Management Strategy is as follows:

Waste Hierarchy		
Cleaner Production	Prevention	
	Minimisation	
Recycling	Re-Use	
	Recovery	
	Composting	
Treatment	Physical	
	Chemical	
	Destruction	
Disposal	Landfill	

Disposal Infrastructure Development

Goal
Improve, Develop and Maintain Infrastructure to comply with Legislative Requirements and Municipal Needs
Objectives
Authorise the Niekerkshoop and Marydale disposal sites.
Upgrade and Improve management of Prieska, Niekerkshoop and Marydale Disposal Sites

Waste Collection Infrastructure

Goal
Provide Effective Waste Collection
Objectives
Extend Service to Un-serviced Areas
Replace and Maintain Collection Fleet for Service Delivery
Standardise Collection and Optimise Collection Route

Institutional Capacity and Human Resources

Goal
Provide Effective Waste Management Service
Objectives
Effective Structure and Extension of Human Resources
Train Staff

Financial Resources

Goal
Provide Cost Effective Waste Management Service
Objectives
Improve Payment of Service Tariffs

Dissemination of Information/Communication

Goal
Capacity Building through Information Sharing
Objectives
Develop and Maintain a Waste Information System
Contribute to District Forums
Improve Community Awareness and Education

Management of Illegal Activities

Goal
Minimise/Prevent Illegal Activities
Objectives
Develop Penalty System for Illegal Activities
Improve Removal of Illegally Dumped Waste

Waste Minimisation

Goal
Decrease Waste Deposited on Landfill
Objectives
Encourage recycling activities if proven feasible Activities
Encourage Waste Minimisation

SECTION 9: ALTERNATIVES & PROPOSALS

9 ALTERNATIVES

The Goals and Objectives identified in the previous section must now be evaluated and alternative solutions developed to meet them. From the various alternative solutions developed, a number of feasible scenarios, taking into account various aspects of the waste management cycle, will be compiled. These scenarios will then be evaluated in terms of a number of criteria to ensure that the most suitable scenario is selected for implementation.

The following information is provided as background information to enable the reader to better comprehend conditions and terminology.

COLLECTION SERVICES

The three main aspects of collection services are (a) the waste receptacles, (b) collection frequency and (c) position of receptacles.

Waste Receptacles

There are a number of waste receptacles that can be used such as 85 litre bins, 240 litre trolley bins, skip containers, etc. The receptacle will be dependent on the volume of waste generated at the collection point, the type of waste, the type of collection vehicle and the cost of the service to the community. In densely populated areas such as larger cities, the 240 litre wheelie-bin system is fairly common. This is due to the fact that there is generally more waste in these areas requiring larger waste receptacles. These wheelie-bins are emptied mechanically into the collection vehicle. There is however a cost implication since these containers are fairly expensive and costs must somehow be recovered, usually directly influencing the cost of the service. It is however a once off capital cost which might be weighed against the continuously monthly cost of bin liners.

The most commonly used system is the black bag system. Usually a bin liner (black bag) is placed in an 85 litre container (dustbin) and used for disposal purposes. The bag is then removed from the bin and placed on the sidewalk for collection. Bags can be picked up by hand and dropped into the collection vehicle.

In more rural areas almost any type of receptacle is used, depending on how formal the collection system is. In some rural or less affluent areas skip containers are placed at strategic points. The community is then responsible to bring their waste and dispose of it in the skip containers from where it is collected. The level of co-operation from the community usually determines the success of such a system.

For commercial collection, i.e. restaurants, shops, etc., a vast number of receptacles is used. In most instances the type of receptacles are determined by the type and volume of waste disposed of as well as the type of service rendered. In smaller towns the municipality usually renders the service and they provide the receptacles. In larger towns there are usually private contractors collecting waste from commercial collection points.

Generators of industrial waste usually dispose of their waste themselves, or use a private contractor. The receptacles used are usually skip containers.

To summarise, the type of receptacle will be dependent on what the community can afford, the volumes of waste generated, the type of waste and the special needs of the community.

Collection Frequency

The collection frequency is again dependent on the volumes of waste generated, the availability of the equipment and the level of service. The norm is that domestic collection is done once a week in most areas. Commercial collection is dependent on the volumes generated and the types of waste. A restaurant, for instance, will have their waste removed up to four times a week should the volumes require it. This is due to the fact that most of their waste is food residue that can cause an odour and fly problem within a day or two.

Placement of Receptacles

In most instances domestic waste receptacles are placed on the pavement on the day of collection. This allows for easy access to the receptacle and saves on actual collection time. In some instances, collection of commercial receptacles is done from the actual premises.

EQUIPMENT

The type of equipment is usually determined by the cost of the service to the residents, the condition of the collection roads (surface, alignment, etc), the distance to the landfill and the number of collection points serviced per day.

Cost of Equipment

There is a wide range of collection equipment that can be utilised for collection equipment. This can range from a tractor and trailer system (R 360 000) up to a top of the range REL (R 1 100 000). It is vital that the right equipment is utilised for the right conditions and type of service required. This will be clarified in the following points.

Conditions of Collection Roads

The road condition that the collection vehicle has to drive plays a major factor when deciding on a particular collection vehicle. If one has to compare a rural road full of potholes to a road in a city suburb, a tractor and trailer would be more suitable in the rural application as opposed to a state of the art 20 m³ REL, which is not built to drive on poorly maintained roads. The maintenance cost would be above normal for an REL to drive these roads on a daily basis due to wear and tear on components. A tractor and trailer, which is a much more robust type of system, will be better suited to such conditions. In an urban environment a tractor and trailer will be less suited as the landfill is usually far from the collection areas and will take to long to drive to the landfill and back.

Distance to the Landfill

As discussed above, distance to the landfill plays an important role. For instance if the landfill is 20 km from the collection area, a tractor and trailer will spend most of the time driving from the collection area to the landfill and back. A general rule is that a tractor and trailer combination should not drive further than 7 km from the collection area to the landfill. For distances above 7 km, alternative types of vehicles should be considered.

There is a collection system using a mobile compactor with a demountable container. This can be used in various applications. Once the container is full, it is demounted and left for a 'Roll-on Roll-off' truck to collect. The collection vehicle therefore does not waste any time driving to the landfill and back.

Another possible application will be in a regional context where the vehicle collects waste in a certain area, leaves the container at a designated point and moves on to the next area. The container will then be collected by a "Roll-on Roll-off" truck for disposal at the landfill.

Number of Collection Points

The number of collection points becomes critical in an urban area where a 20 m³ REL collects up to 1 200 service points per day. A collection vehicle's sole purpose should be to collect waste and not spend time driving from the collection area to the landfill and back. Aspects such as compaction also play an important role. A 20 m³ REL can collect up to 60 m³ of waste at a time because of a one to three (1:3) compaction ratio, while a tractor/trailer combination can collect only 5 m³ to 10 m³ at a time before it has to offload. The tractor/trailer therefore has to make a lot more trips to the landfill than a 20 m³ REL. The REL therefore has more time for the collection and

service of more points. It must also be noted that the “runners”, collecting and loading the collection vehicle, are idling while the vehicle is on the road to the dumpsite and back.

Landfill Equipment

On the larger landfills a landfill compactor, loader, water container and tipper will be found to ensure effective operating conditions. For smaller landfills a TLB will handle waste effectively enough and on communal landfills where the trench system is used, a machine is only required part time. The type of equipment will depend on the type of operation (trench, cell, etc.) and the volume of the waste generated. Compaction is usually an important factor since this allows for more waste to be disposed of at a landfill thereby prolonging the life of the landfill. Economics however play an important role, since the volume of waste has to justify the type of equipment. It is of no use using a 30-ton landfill compactor, capable of handling over 500 tons of waste per day, on a landfill only receiving 10 tons per day. Such a machine cost in the region of R 2 600 000 and operating cost is in the region of R 180.00/hour without the cost of the operator or maintenance costs.

From the above it is evident that the choice of equipment is very important to ensure the correct equipment is used for the correct application.

The following pictures represent some of the equipment mentioned above.

	12 m³ REL

	Landfill compactor
	19 m³ REL: Lifting 240 litre wheel bin ***19 m³ REL: Lifting 1.75 m³ wheel bin***
	Tractor with utility trailer

	Gravity compactor
	240 litre wheelie bin

9.1 DISPOSAL INFRASTRUCTURE DEVELOPMENT

Goal
Improve, Develop and Maintain Infrastructure to comply with Legislative Requirements and Municipal Needs
Objectives
Authorise the Niekerkshoop and Marydale disposal sites.
Upgrade and Improve management of Prieska, Niekerkshoop and Marydale Disposal Sites

Objective 1: Authorise the Niekerkshoop and Marydale disposal

The Municipality is currently operating the Niekerkshoop and Marydale landfill sites without operational authorisations issued by the Department of Environmental Affairs and Tourism.

Authorisation applications for the continued operation of the Niekerkshoop and Marydale landfills have to be compiled and submitted to DEAT for issuing. An EIA should be done for each landfill in terms of the EIA regulations. The EIA process runs parallel with the authorisation process by DEAT. An authorisation for continued operation can however only be issued by DEAT once a Record of Decision (RoD) has been issued by the Department of Water Affairs and Forestry. The authorisation applications will have to be submitted to DWAF as well to obtain the required RoD in terms of section 20(6)(b) of the Environmental Conservation Act (50 of 2003).

The operation of the Niekerkshoop and Marydale landfills is not up to standard. Waste is being disposed of haphazardly and burned. The operations should be done in accordance with an operational plan which has to be submitted as part of the authorisation applications for these sites. The sites should be operated in accordance with the Minimum Requirements for Waste Disposal by Landfill. This would *inter alia* entail proper access control and regular covering of the waste at these sites.

Objective 2: Upgrade and Improve Management of Prieska, Niekerkshoop and Marydale Disposal Sites

The **Prieska Landfill Site** is permitted by DWAF as a G:C:B$^-$ site in 2003. The site is however not well managed and not operated in accordance with the permit conditions or the operational plan that was submitted as part of the permit application, due to financial and personnel constraints. The waste is not covered on a regular basis and is burned once disposed of. The waste should be centralised and the working front be kept as small as possible. Waste should then be regularly compacted and covered. The site is not fenced and access is not controlled. No record-keeping takes place at the entrance to the site. The Municipality will have to control access by upgrading the fence and construct a proper entrance with ablution facilities for the workers. With proper access control the Municipality would be able to keep proper records of waste disposed of.

Wind-blown litter is a serious problem at the site. The Municipality has two options available. The first is that the waste is covered or burned as it is disposed of at the landfill site. This however would be impractical as it would lead to ineffective covering and compacting of the waste or could cause nuisance conditions when waste is burned. Another option is to make use of movable fences close to the working face to control wind-blown litter. This is probably the best option as it would require the minimum disruption in the management of the site.

There was one employee stationed at the site. The site should be manned and supervised by a suitably qualified operator to ensure that waste is being disposed of at the dedicated areas on the site. The operator can also do access control.

The site has approximately enough airspace for the next 20 years.

The **Niekerkshoop** landfill site is not authorised in terms of Section 20 of the Environment Conservation Amendment Act, 2003.

The operation of the site is not up to an acceptable standard. The open burning of waste in a pit forms part of the operational procedure for the site. The waste is not covered on a regular basis due to the absence of proper landfill equipment. Waste should be disposed of by keeping the working face as small as possible. The burning of waste should be phased out and a proper cell method should be followed with the operations. Waste should then be regularly covered. An alternative to consider is the trench method of operation, especially if cover material is lacking. The trench method can only be followed as a method to operate the site once the geotechnical characteristics of the area are known.

The site is fenced (needs maintenance) but access is not controlled. This can be done by appointing staff at the entrance to record waste disposal and upgrade the fencing around the site to prevent illegal access. The site should be operated in accordance with an Operational Report

(which has to be compiled and submitted as part of the Authorisation Application to DEAT). In the mean time the site should be operated in accordance with the Minimum Requirements for Waste Disposal by Landfill, especially with regard to the open burning requirements, until this practise has been phased out.

The **Marydale** site is not authorised in terms of Section 20 of the Environment Conservation Amendment Act, 2003.

The site is not fenced and access is not controlled. Wind-blown litter is also a serious problem in the vicinity of the site. There is no landfill equipment on the site and therefore covering of the waste does not occur at all. The site is not properly operated with waste being disposed of haphazardly and burned after disposal. The site should be upgraded (necessary entrance control infrastructure and fencing) and be operated in accordance with an Operational Report which will have to be submitted as part of the Authorisation Application to DEAT and in accordance with the Minimum Requirements for Waste Disposal by Landfill. The operating alternatives would be the same as mentioned above for the Niekerkshoop disposal site.

9.2 WASTE COLLECTION INFRASTRUCTURE

Goal
Provide Effective Waste Collection
Objectives
Extend Service to Un-serviced Areas
Replace and Maintain Collection Fleet for Service Delivery
Standardise Collection and Optimise Collection Route

Objective 1: Extend Service to Unserviced Areas

The Municipality at the moment is delivering a refuse removal service in all the urban areas. New residential developments are planned for the Siyathemba Municipality (which include 43 low income RDP houses in Niekerkshoop; 43 low income RDP houses in Marydale; 114 low income RDP houses in Prieska, as well as another additional 250 low income RDP houses for development in Prieska once the initial ones in Prieska have been completed) where refuse collection will have to be rendered in future. It is essential that in conjunction with the Town Planning Department that future residential and business area expansion are catered for in terms

of refuse removal. This will allow the Municipality to, at an early stage, determine the possible costs involved and therefore will be able to adjust their budget accordingly. This will allow the Municipality to service the new areas when they are developed.

The Municipality at the moment does not provide a waste removal service to the farms in the municipal area. The extent of the Municipality and the remote locations of several of the farms will not make this an economically feasible option. It is recommended that the Municipality assist the farmers by informing them of correct disposal measures and safety precautions.

Objective 2: Extend and Maintain Collection Fleet for Service Delivery

The Siyathemba Municipality do not have sufficient equipment to deliver an effective service in the existing municipal area. The Siyathemba Municipality has a few vehicles that are old and are due for replacement. The tipper truck utilised in Prieska for example are in need of urgent replacement.

It is recommended that a vehicle replacement plan be compiled to ensure that future planning for the replacement of the vehicles is done at the appropriate time. The Municipality should inspect the vehicles and establish a lifespan for each of the vehicles based on the general wear and tear of the vehicle. This will be influenced by the specific route and conditions of the road that the vehicle has to travel. The current condition of the vehicles should also be taken into account. This investigation will determine which vehicles are due for replacement first and the Municipality will be able to budget for such vehicles. Due to cost concerns the Municipality will also be able to divide the capital cost of the vehicles over more than one financial year. The replacement of old and unreliable vehicles is a matter of urgency as this may in future undermine the effectiveness of the current refuse removal system.

With the purchase of the new vehicles it is essential that the Municipality negotiate with the various suppliers for the maintenance of the vehicles. The older vehicles are still maintained by the Municipality, but the phased replacement of the vehicles will allow for the regular service of the vehicles by the supplier. This will prolong the lifespan of the vehicles as well as ensuring that they are more reliable.

Objective 3: Standardise Collection and Optimise Collection Route

The Siyathemba Municipality utilises a black refuse bag system. Residents have to buy their own refuse bags. The Municipality accepts any number of bags per household, so there is no specific limit. The bags are placed on the curb outside the house and collected from there.

The bags have to be loaded onto the back of the collection vehicles by hand. In some instances where black bags are not available the waste is disposed off in any available receptacle.

Due to the limited number of service points in the urban areas of the Siyathemba Municipality and the road conditions, the use of a Rear End Loader (REL) for refuse collection will not be economically feasible. It is therefore suggested that the Municipality should continue with the current refuse collection system, but that it be revised regularly and be adopted should it be necessary.

It would also not be feasible for the Municipality to supply the agricultural holdings with formal receptacles and to render a service.

The extension of the service to new developed areas over time will necessitate new route planning as well as adjustments to the current collection route. The shortest possible route with the least amount of repeat must be established. It is not the purpose of the IWMP to provide detailed route planning. The appointment of a consultant to investigate the possible route is not necessary and should the Municipality feel they have the specific expertise, they can conduct the route planning exercise themselves.

9.3 INSTITUTIONAL CAPACITY AND HUMAN RESOURCES

Goal
Provide Effective Waste Management Service
Objectives
Effective Structure of Human Resources
Train Staff

Objective 1: Effective Structure of Human Resources

The Siyathemba Municipality has a shortage of personnel, specifically with regard to the management of the disposal sites. Limited or no personnel are present at the disposal sites. The proper management of the landfill sites will necessitate that the Municipality has personnel at the sites. Vacant posts should be filled and posts should be created for the management of the disposal sites. Due to the small size of the Niekerkshoop and Marydale sites, the Municipality can appoint at least 1 person per disposal site, which will have to guard the gate (entrance control), supervise/operate the site and pick up wind-blown litter when necessary.

The workers responsible for waste collection have other duties as well.

The following is a breakdown of the possible Municipal requirements.

POST	SHORTAGE	SERVICE AREA
1 x Site Manager 1 x Gate guard 1 x Litter Picker	**1 each**	**Prieska Landfill Site**
1 x Site Manager/gate guard/operator	**1**	**Marydale Landfill site**
1 x Site Manager/gate guard/operator	**1**	**Niekerkshoop Landfill site**

Objective 2: Train Staff

The delivery of an effective refuse delivery service and efficient waste management within the Municipality depends on the ability of the staff to perform their specific functions. It is therefore a non-negotiable that staff is trained to perform their specific duties. Depending on the level of training required, general labourer versus compactor operator, it has to be decided whether to provide in-house training or whether to provide the employee with specialised training. In-house training should only be attempted if the capacity and knowledge exist within the Municipality. Based on the fact that for lower levels employees the knowledge is available within the Municipality, it is recommended that specialists be obtained to provide more specialised training.

9.4 FINANCIAL RESOURCES

Goal
Provide Cost Effective Waste Management Service
Objectives
Improve Payment of Service Tariffs
Standardise Tariff Structure

The Municipality is at the moment experiencing a lack of payment of tariffs, which needs to be rectified to provide a cost effective waste management service.

Objective 1: Improve Payment of Service Tariffs

Formal households as well as businesses currently serviced are billed on a monthly basis in conjunction with their water and electricity bills. Penalties for non-payment of accounts should therefore easily be enforced by withholding services. This however is an administrative problem that generally takes a long time.

The inclusion of more areas however, may increase the likelihood of non-payment by residents. A possible option is a pre-paid system similar to the one used for electricity. The system can be a coupon-based system where coupons can be bought in advance for a specific month. The negative aspect is that non-payment and subsequent non-delivery of services will lead to an increase in the instances of illegal dumping in the area. It is recommended that the pre-paid system be used in accordance with strategies to prevent illegal dumping in the municipal area. It

would also be possible for the Municipality to retrieve some of the lost service fees from the Equitable Share.

Objective 2: Standardise Tariff Structure.

Upgrading service delivery throughout the municipal area will entail standardising the service that is delivered to all the households in the area. All households must therefore be serviced on a weekly basis, either by the Municipality or by the community. It is important that the tariffs identified for service delivery is comparable throughout the municipal area. Specific tariffs for a specific service, municipal or communal, should therefore be levied and not vary depending on the geographical area. The standardisation of the tariff structure will provide uniformity that may encourage payment of Tariffs. Tariffs for additional services, including garden and commercial waste removal, should also be according to service delivery.

9.5 DISSEMINATION OF INFORMATION/COMMUNICATION

Goal
Capacity Building through Information Sharing
Objectives
Develop and Maintain a Waste Information System
Contribute to District Forums
Build Community Awareness

Objective 1: Develop and Maintain a Waste Information System

The main objective would be to develop and maintain a WIS. This system would allow for the keep of comprehensive records of waste disposal and collection on which informed decision-making can be based and to comply with the reporting requirements of the relevant authorities such as DEAT.

The costs involved in the development of a WIS will vary depending on the structure and contentiousness of the area. The National Department of Environmental Affairs and Tourism is at the moment in the process of developing a generic WIS that may be provided to the various Municipalities for implementation.

Objective 2: Contribute to District Forums

The current difference in service delivery management within the Northern Cape Province necessitates that frequent information sharing sessions be held to share capacity building information. Another option is to provide quarterly reports regarding waste management (for each town) to other Local Municipalities. It is proposed that the information sharing sessions would be the preferred option since it would allow for discussions on problems encountered and not only provide information. These quarterly meetings should be attended by all the Local Municipalities within the District Municipality as well as representatives from the relevant Northern Cape Provincial Departments as well as DEAT.

Objective 3: Build Community Awareness

The Siyathemba Municipality presently does not have any formal community awareness campaigns that are directed at informing the general community with regards to disposal and recycling.

A top down approach by the municipality relies heavily on non-payment penalties to ensure that residents comply with legislation. Recycling and waste minimisation initiatives however, are not included in the normal service delivery and can only be effectively achieved with the co-operation of the residents.

It is therefore vitally important that the community is made aware of initiatives, waste recycling activities and the advantages of waste minimisation and recycling by the Municipality. This can either be achieved by advertisements and notices in the local newspapers or by providing information regarding these initiatives on the municipal bills distributed each month. The municipality can also conduct a road show to all the towns to demonstrate to and inform people of waste related issues.

9.6 MANAGEMENT OF ILLEGAL ACTIVITIES

Goal
Minimise/Prevent Illegal Activities
Objectives
Develop Penalty System for Illegal Activities

The Siyathemba Municipality as with several other Municipalities in the country has problems with illegal dumping throughout the municipal area. This can either be attributed to a lack of an effective refuse removal service or residents being unaware of their options regarding private waste disposal. A certain portion of these activities will be eliminated through proper community awareness programs as discussed above.

Objective 1: Develop Penalty System for Illegal Activities

It is imperative that the Municipality develops and implements a system to minimise or stop illegal dumping within the Municipal area. The major problem facing the Municipality is that they do not have the specific manpower to police the illegal disposal of waste. Within the serviced areas it is easier to regulate illegal dumping and introduce a penalty system for offenders. There are several actions the Municipality can take to minimise illegal dumping and introduce such a penalty system.

The first is that the Municipal By-laws must be amended to allow the Municipality to issue spot fines for residents caught dumping waste in illegal areas. This will to a certain degree reduce and prevent illegal dumping within the town boundaries. The disadvantage is that it will not reduce dumping outside the town boundary and it will increase the pressure on already limited human resources.

A second option will be to introduce community awareness whereby a community watch movement is introduced. This will limit the pressure on the human resources of the municipality as neighbourhood watch systems are put in place. Incentives such as discount on regular fees for “clean” neighbourhoods can be introduced to encourage these activities.

A third option is the provision of garden/domestic refuse skips with ramps at strategic locations throughout the town to minimise travelling distances for the general public. The Municipality can then remove the refuse on a monthly basis.

It is recommended that a combination of the above be implemented to find an effective solution to illegal waste. The amendment of the by-laws will provide the municipality to officially produce policies and strategies that will benefit the community. Through community awareness and a neighbourhood watch system the residents will have all the information regarding the disposal of waste in their area. They will also be aware of the incentive scheme to prevent illegal dumping from taking place within their surrounds. To prevent illegal dumping outside of town skips should be placed at strategic location to provide convenient access to a dumping facility.

The costs of the skips are:

Estimated Skip Prices		
Refutainer	**5.5 m^3**	**R 6,500.00**
Refutainer	**6 m^3**	**R 6,800.00**
Refutainer	**9 m^3**	**R 8,200.00**
Refutainer	**11 m^3**	**R 9,200.00**

9.7 WASTE MINIMISATION

Goal
Decrease Waste Deposited on Landfill
Objectives
Encourage recycling activities if proven feasible Activities
Encourage Waste Minimisation

Objective 1: Encourage recycling activities if proven feasible Activities

There are no recycling activities within the Siyathemba Municipal area. The Municipality has to encourage recycling activities if proven feasible by providing measures to increase the convenience of recycling for the average person. Recycling activities tend to fail due to the effort required from the community. The Municipality therefore can place recycling containers at central and visible locations to maximise exposure and convenience. Community awareness about recycling and recycling initiatives must also be increased through advertisements and the distribution of flyers and letters.

There is also a national initiative that will put a levy on the purchase of new and retread tyres. This levy will go into a national fund that will be responsible for the disposal and possible recycling of used tyres.

Objective 2: Encourage Waste Minimisation.

Waste minimisation and recycling at source is more effective than recycling since it reduces the removal and transport costs. It is therefore recommended that waste sorting and minimisation be encouraged amongst the businesses in the Municipal area. It is recommended that a system be implemented whereby businesses within the community are billed for waste removal based on the number of receptacles or mass collected from their premises. They therefore effectively receive a discount for in house recycling activities, as it will limit the number of receptacles collected.

SECTION 10: RECOMMENDATIONS

10 RECOMMENDATIONS

The recommendations that have been proposed during the discussion of the alternatives are listed in the following table (Recommendations for various scenarios are included):

Recommendations		
Focus Area	**Objective**	**Recommendation**
Disposal Infrastructure Development	**Objective 1: Authorise the Marydale and Niekerkshoop Disposal Sites for continued operation**	**Compile authorisation application (including EIA) for Niekerkshoop and Marydale, to be submitted to DEAT.**
	Objective 2: Upgrade and Improve Management of Prieska, Marydale and Niekerkshoop Landfill Sites	**Construct Guard house and ablution facilities at each site**
		Upgrade fencing at Niekerkshoop. Construct fence at Prieska and Marydale landfill sites.
		Improve operations at Prieska, Niekerkshoop and Marydale disposal sites in accordance with operational plans which will have to be compiled and submitted as part of Authorisation Applications (in the case of Marydale and Niekerkshoop) and in accordance with Minimum Requirements and permit conditions (Prieska).
		Maintain Infrastructure on

		the Sites
Waste Collection Infrastructure	**Objective 1: Extend Service to Un-serviced Areas in Municipal Area**	**Include additional residential developments into Service Delivery Area**
		Inform Farmers of Correct Waste Disposal Practices.
	Objective 2: Extend and Maintain Collection Fleet	**Compile Equipment Replacement Plan**
		Negotiate Maintenance Contract with Vehicle Suppliers
		Maintain Current Collection Fleet
	Objective 3: Standardise Collection and Optimise Collection route	**Phase in Standard Refuse Receptacles with new collection equipment.**
		Amend and optimise collection route.
Institutional Capacity and Human Resources	**Objective 1: Effective Structure of Human Resources**	**Appoint a Landfill Manager, a gate guard and a litter picker at Prieska landfill and a site supervisor/operator at Niekerkshoop and Marydale landfill Sites.**
	Objective 2:Train Staff	**Locally train low level staff and provide specialised training for specialised positions.**
		Ensure proper training of

		contracted personnel
Financial Resources	Objective 1: Improve Payment of Service Tariff	Implement pre-paid system
		Implement Penalties
		Redistribute Equitable Share
	Objective 2: Standardise Tariff Structure	Implement Standardised Tariff System
Dissemination of Information / Communication	Objective 1: Develop and Maintain a WIS	Develop WIS
	Objective 2: Contribute to District Forums	Attend workshops
	Objective 3: Build Community Awareness.	Build awareness through flyers, newspaper notices and road shows.
Management of Illegal Activities	Objective 1: Develop Co-operation Strategies to Prevent Illegal Activities.	Amend Bylaws
		Establish Community Watch
		Introduce Incentive schemes for Clean Neighbourhoods.
		Provide Skips throughout Town for Refuse Dumping

Waste Minimisation	Objective 1: Encourage	Provide recycling containers

	recycling activities if proven feasible Activities	**throughout town**
	Objective 2: Encourage Waste Minimisation	**Incentive Schemes for in House Recycling**

SECTION 11: IMPLEMENTATION PROGRAM

11 IMPLEMENTATION PROGRAM

The following is an implementation programme based on the recommendations. The programme identifies actions to be taken to achieve the proposed recommendations.

Implementation Programme

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
Disposal Infrastructure Development	**Compile authorisation application (including EIA) for Niekerkshoop and Marydale, to be submitted to DEAT**	Apply for authorisation for continued operation of the Niekerkshoop and Marydale landfill sites, including EIA	Follow up on authorisation status					
	Upgrade and Improve Management of Prieska, Niekerkshoop and Marydale Landfill Sites	Construct guard house and ablution facilities at the Landfill Sites Upgrade fencing at the Niekerkshoop Landfill Site and construct fencing at Prieska and Marydale landfill sites		Audit Management of Landfill Sites	Audit Management of Landfill Sites	Audit Management of Landfill Sites	Audit Management of Landfill Sites	Audit Management of Landfill Sites

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
Waste Collection Infrastructure	**Extend service to un-serviced areas.**	Assist Farmers with Proper Waste Disposal Techniques	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops
	Extend & Maintain Collection Fleet	Compile Equipment Replacement Plan	Implement Equipment Savings Plan	Replace equipment as Required	Replace equipment as Required Negotiate Maintenance Contract	Replace equipment as Required Negotiate Maintenance Contract	Replace equipment as Required Negotiate Maintenance Contract	Replace equipment as Required Negotiate Maintenance Contract
		Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet
	Optimise Collection Route	Optimise Collection Route	Include new Areas into Collection Route					

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
	Standardise Refuse Receptacles	Continue with current refuse collection system, but continuously review the system for possible phasing in of 240 l wheelie bins should it prove to be feasible						
Institutional Capacity & Human Resources	**Employ Additional Staff to manage landfill sites**	Appoint Landfill Manager, gate guard and litter picker at Prieska and a site supervisor/operator at Niekerkshoop and Marydale landfill sites	Employ Staff as Vacancies Develop					
	Locally Train Low Level Staff **Specialised Training for Specialised Posts**	Train New Staff Ensure Training of Landfill Managers						
Financial Resources	**Implement Standardised Tariff Structure**	Evaluate Level of Service Delivery Develop Standardised Tariffs for Specific Levels of Service.		Update Tariffs as Service Levels Improve Increase Tariffs to Combat Inflation				
	Implement Pre-paid system	Inform Community regarding Implementation of System Implement Pre-Paid System		Upgrade System as Required				
Dissemination of Information / Communication	Develop WIS	Appoint Consultant to Develop WIS		Maintain and Update WIS as Situation Change in Municipality				
	Attend Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
	Build Community Awareness	Publish Newspaper Notices and Flyers. Conduct Road Shows	Publish Newspaper Notices and Flyers.	Publish Newspaper Notices and Flyers. Conduct Road Shows	Publish Newspaper Notices and Flyers.	Publish Newspaper Notices and Flyers. Conduct Road Shows	Publish Newspaper Notices and Flyers.	Publish Newspaper Notices and Flyers. Conduct Road Shows
Management of Illegal Activities	**Establish Community Watch Programme**	Inform Communities of Proposed Program	Establish Community Watch System Implement Incentive Schemes		Incorporate New Neighbourhoods into the Community Watch System			
	Amend By-Laws	Amend By-Laws	Update By-Laws as Required					
	Provide Skips Throughout Town	Purchase Skips for Existing Neighbourhoods	Purchase Skips for New Developments as the Need Arise					
Waste Minimisation	**Provide Recycling Containers Throughout Town**	Purchase Recycling Containers Locate Containers at Strategic Places Improve Community Awareness	Add Additional Containers to Service New Development Areas Continual Awareness Program					
	Incentive Schemes for In-House Recycling	Develop Discount System for Businesses Implement Discount Strategy	Maintain and Evolve Discount System to Incorporate New Businesses					

Cost Estimates

<table>
<tr><th rowspan="2">Focus Area</th><th rowspan="2">Recommendation</th><th colspan="7">Actions</th></tr>
<tr><th>2008/2009</th><th>2009/2010</th><th>2010/2011</th><th>2011/2012</th><th>2012/2013</th><th>2013/2014</th><th>2014/2015</th></tr>
<tr><td rowspan="2">Disposal Infrastructure Development</td><td rowspan="2">Compile authorisation application (including EIA) for Niekerkshoop and Marydale, to be submitted to DEAT</td><td>Apply for authorisation for continued operation of the Niekerkshoop and Marydale landfill sites, including EIA</td><td colspan="2">Follow up on authorisation status</td><td colspan="4"></td></tr>
<tr><td>R 500 000 (R250 000 per site)</td><td colspan="2">No cost assigned, to be conducted by Municipality/consultant</td><td colspan="4"></td></tr>
<tr><td rowspan="4"></td><td rowspan="4">Upgrade and Improve Management of Prieska, Niekerkshoop and Marydale Landfill Sites</td><td colspan="2">Construct guard house and ablution facilities at the landfill sites</td><td colspan="5" rowspan="3">Audit Management of Landfill Sites (twice yearly audit)

(8% CPI Increase)</td></tr>
<tr><td>R 60 000</td><td>R 60 000</td></tr>
<tr><td colspan="2">Upgrade fencing at the Niekerkshoop Landfill Site and construct fencing at Prieska and Marydale landfill sites</td></tr>
<tr><td>R 172 500</td><td>R 172 500</td><td>R 50 000</td><td>R 54 000</td><td>R 58 320</td><td>R 62 985</td><td>R 68 024</td></tr>
</table>

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
Waste Collection Infrastructure	**Extend service to un-serviced areas.**	Assist Farmers with Proper Waste Disposal Techniques	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops	Add new residential development areas as it develops
		No Costs Assigned. To be conducted by Municipality	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**
	Extend & Maintain Collection Fleet	Compile Equipment Replacement Plan	Implement Equipment Savings Plan	Replace equipment as Required	Replace equipment as Required Negotiate Maintenance Contract	Replace equipment as Required Negotiate Maintenance Contract	Replace equipment as Required Negotiate Maintenance Contract	Replace equipment as Required Negotiate Maintenance Contract
		R 25 000	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**
		Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet	Maintain Current Collection Fleet
		No Costs Assigned. In Current Municipal Budget	**No Costs Assigned. In Current Municipal Budget**	**No Costs Assigned. In Current Municipal Budget**	**No Costs Assigned. In Current Municipal Budget**	**No Costs Assigned. In Current Municipal Budget**	**No Costs Assigned. In Current Municipal Budget**	**No Costs Assigned. In Current Municipal Budget**
	Optimise Collection Route	Optimise Collection Route		Include new Areas into Collection Route				
		R 12 000	**R 12 000**	**No Costs Assigned. To be Conducted by the Municipality**				

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
	Standardise Refuse Receptacles	Continue with current refuse collection system, but continuously review the system for possible phasing in of 240 l wheelie bins should it prove to be feasible						
		No costs Assigned. To be conducted by the Municipality						
Institutional Capacity & Human Resources	**Employ Additional Staff to manage landfill sites**	Appoint Landfill Manager, gate guard and litter picker at Prieska and a site supervisor/operator at Niekerkshoop and Marydale landfill sites	Employ Staff as Vacancies Develop					
		No Costs Assigned. To be Negotiated by the Municipality	**No Costs Assigned. To be Conducted by the Municipality**					
	Locally Train Low Level Staff	Train New Staff (High First Year Costs Followed by Updating Training if Required)						
		R 50 000	**R 10 000**	**R 10 800**	**R 11 664**	**R 12 597**	**R 13 604**	**R 14 693**
	Specialised Training for Specialised Posts	Ensure Training of Landfill Managers						
		No Costs Assigned. To be Conducted by the Municipality						
Financial Resources	**Implement Standardised Tariff Structure**	Evaluate Level of Service Delivery Develop Standardised Tariffs for Specific Levels of Service.	Update Tariffs as Service Levels Improve Increase Tariffs to Combat Inflation					
		No Costs Assigned. To be Conducted by the Municipality	**No Costs Assigned. To be Conducted by the Municipality**					

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
	Implement Pre-paid system	Inform Community regarding Implementation of System Implement Pre-Paid System		Upgrade System as Required				
		R 65 000	**R 40 000**	**No Costs Assigned. To be Conducted by the Municipality**				
Dissemination of Information / Communication	Develop WIS	Appoint Consultant to Develop WIS		Maintain and Update WIS as Situation Change in Municipality				
		No Costs Assigned. Generic WIS being designed by DEAT		**No Costs Assigned.**				
	Attend Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops	Attend Quarterly Waste Management Workshops
		No Costs Assigned	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**	**No Costs Assigned**
	Build Community Awareness	Publish Newspaper Notices and Flyers. Conduct Road Shows	Publish Newspaper Notices and Flyers.	Publish Newspaper Notices and Flyers. Conduct Road Shows	Publish Newspaper Notices and Flyers.	Publish Newspaper Notices and Flyers. Conduct Road Shows	Publish Newspaper Notices and Flyers.	Publish Newspaper Notices and Flyers. Conduct Road Shows
		R 35 000	**R 12 000**	**R 38 000**	**R 14 000**	**R 40 000**	**R 16 000**	**R 42 000**
Management of Illegal Activities	**Establish Community Watch Programme**	Inform Communities of Proposed Program	Establish Community Watch System Implement Incentive Schemes		Incorporate New Neighbourhoods into the Community Watch System			
		R 20 000	**R 20 000**	**R 20 000**	**No Costs Assigned**			

Focus Area	Recommendation	Actions						
		2008/2009	**2009/2010**	**2010/2011**	**2011/2012**	**2012/2013**	**2013/2014**	**2014/2015**
	Amend By-Laws	Amend By-Laws	Update By-Laws as Required					
		No Costs Assigned	**No Costs Assigned**					
	Provide Skips Throughout Town	Purchase Skips for Existing Neighbourhoods	Purchase Skips for New Developments as the Need Arise					
		R 6 800 /skip						
Management of Illegal Activities	**Provide Recycling Containers Throughout Town**	Purchase Recycling Containers Locate Containers at Strategic Places Improve Community Awareness		Add Additional Containers to Service New Development Areas Continual Awareness Program				
		R 60 000	**R 40 000**	**No Costs Assigned**				
	Incentive Schemes for In-House Recycling	Develop Discount System for Businesses Implement Discount Strategy		Maintain and Evolve Discount System to Incorporate New Businesses				
		No Costs Assigned. To be Conducted by the Municipality		**No Costs Assigned. To be Conducted by the Municipality**				

SECTION 12:
FINANCIAL RESOURCES AND IMPLEMENTATION PRIORITIES

12 FINANCIAL RESOURCES & IMPLEMENTATION PRIORITIES

The Siyathemba Municipality has several financial resources options available to them for the implementation of the various recommendations. The first is resources form the Municipal budget. The majority of the Municipalities within the country however have a severe shortage of Municipal funds. A second option available is in the form of Municipal Infrastructure Grants (MIG) or the Special Municipal Infrastructure Fund (SMIF). The National Government is working on a three-year cycle and business plans have to be submitted for a specific project. The government then approves these projects and funds are made available through the District Municipalities. This MIG grant is from the National Government and is generally only applicable to the building of Infrastructure within a Municipal area, but waste equipment may be considered.

A third option is funding from the development bank and international development organisations, such as the Finnish Environmental Institute. Several International organisations are currently involved in Solid Waste Management and this therefore seems a very viable option.

The Equitable Share provided by the government is at the moment generally used for water and electricity subsidies. It should however be noted that this subsidy should also be used for subsidising refuse removal tariffs.

The implementation plan indicated in Section 11 represents the ideal or complete solution for waste management within the Siyathemba Municipality. Due tot the fact that the Siyathemba Municipality at the moment does not have the financial resources to implement all of the recommendations it is essential that the Municipality prioritise the recommendations and actions as well as identify the persons needed or responsible for the completion of these tasks.

The following is a breakdown of the tasks according to priority and responsibility.

Focus Area	Priority	Requirements/Responsibility
Infrastructure Development	Compile authorisation application (including EIA) for Niekerkshoop and Marydale, to be submitted to DEAT.	Municipality / Consultant
Infrastructure Development	Upgrade and Improve Management of Prieska, Marydale and Niekerkshoop Landfill Sites	Consultant / Municipality / Contractor

Human Resources	Employ Additional Personnel (landfill managers/operators)	Municipality
Waste Collection	Compile Fleet Replacement Plan and Implement Savings Plan	Consultant / Municipality
Waste Collection	Standardise Refuse Receptacles	Municipality
Human Resources	Train Staff	Municipality
Management of Illegal Activities	Compile Suitable By-laws	Legal Expert/Municipality
Community Awareness	Community Awareness and Community Watch	Municipality
Dissemination of Information	Develop and Maintain WIS	DEAT/Municipality
Waste Minimisation	Community Awareness	Waste Recyclers/Municipality
Waste Minimisation	Provide Recycling Containers	Municipality

The above list of priorities is based on the legal requirements faced by the Municipality as well as on strategies and plans already in place. The legal requirements that is not in place is considered to be of the utmost priority while measures recommended to streamline and convenience the waste management process are located further down the priority list.

SECTION 13: SUMMARY

13 SUMMARY

13.1 DISPOSAL INFRASTRUCTURE

The Siyathemba Municipality has three disposal sites to manage namely the Niekerkshoop, Prieska and Marydale sites. The Prieska site is permitted by DWAF and the Municipality needs to conform to the permit conditions for the operation of the site. The Marydale and Niekerkshoop landfill sites are not authorised in terms of Section 20 of the Environment Conservation Amendment Act and authorisation applications (which include an EIA) for the continued operation of these sites should be submitted to DEAT. The Prieska, Marydale and Niekerkshoop disposal sites should be upgraded and the operations at these sites be improved to comply with the Minimum Requirements for Waste Disposal by Landfill and/or the permit conditions for the sites (once authorisations have been issued to all the sites). The sites should be operated in accordance with the Operational Plans (which will have to be submitted as part of the Authorisation Application reports in the case of Marydale and Niekerkshoop). Since Prieska landfill is authorised by DWAF, the site should be operated in accordance with its permit conditions and the approved Operations Report. The Municipality should ensure that the operations at the disposal sites are done in accordance with sound waste disposal principles and that the sites be effectively managed in the future.

13.2 WASTE COLLECTION INFRASTRUCTURE

The Municipality currently does not have sufficient equipment for the delivery of an effective refuse removal service. The waste collection vehicles are old and in a poor condition. There is a need to plan for the future replacement of these vehicles. The compilation of a replacement plan as well as the implementation of a savings plan will assist the Municipality to plan ahead and budget for the vehicles.

13.3 INSTITUTIONAL CAPACITY AND HUMAN RESOURCES

The Siyathemba Municipality at the current moment has limited or no personnel at the landfill sites. Landfill managers/operators (one person at each disposal site) need to be appointed to ensure the proper management of the landfill sites. It is also essential that the municipal workers are properly trained for their specific tasks.

13.4 FINANCIAL RESOURCES

The current billing system does not seem to be effective. A pre-paid system should be investigated to be implemented where non-payment of fees is present.

13.5 DISSEMINATION OF INFORMATION / COMMUNICATION

A Waste Information System needs to be developed to ensure effective waste management. This information will also enable the Municipality to contribute to the quarterly waste management workshops with the other Municipalities in the District Municipality. The aim of these workshops will be to build capacity within them as well as guide Municipalities with less experience. The communities within the municipal area should also be made aware of proper waste management techniques and the service the Municipality renders.

13.6 MANAGEMENT OF ILLEGAL ACTIVITIES

The Municipality has a problem with illegal dumping within the municipal area. To improve the current situation, the Municipality can introduce a neighbourhood watch system that will aim to prevent illegal dumping within their specific area. The Municipality can also deploy skips at strategic locations across the towns to minimise illegal dumping.

13.7 WASTE MINIMISATION

The Siyathemba Municipality at the moment does not have any formal recycling activities. This can also be attributed to the lack of available market for the recycled materials. The distribution of recycle containers throughout town will further encourage recycling activities if proven feasible activities. The implementation of an incentive scheme for in-house waste minimisation for businesses should also be investigated.

SECTION 14: RECOMMENDATION AND CONCLUSION

14 RECOMMENDATIONS AND CONCLUSION

Apart form the recommendations in Section 10, the following recommendations are made:

A Waste Information System should be implemented for the whole district. The aim of this information system will be to provide all the necessary detail information pertaining to waste management i.e. permit status of landfills, volumes disposed of, condition of the landfills, number and type of equipment, date of purchase, operating and maintenance cost, replacement date, type of service, number of service points (domestic, commercial and industrial), the number of personnel involved, etc.

Decisions concerning new equipment or services can then be made based on accurate information provided by the above system. Some of the information in this document can serve as a basis for future development of such a Waste Information System. The above is regarded to be of the utmost importance to the district as well as the local municipalities.

This IWMP should be re-evaluated and expanded to a detail operational plan, once suitable information is available from the system as to ensure that future planning is done correctly:

- Service levels should be workshopped with the community to obtain their views and inputs on the proposed upgrading of their service and the cost implications involved.

- Community awareness campaigns should be implemented to educate the communities on responsible waste management i.e. why a landfill is fenced, why you dispose of your waste in waste receptacles, why waste is covered at a landfill, why illegal dumping is costly, etc.

- The municipalities should promote recycling and/or waste minimisation. The recyclers on site should be formalised to ensure that they co-operate with the landfill supervisors.

The above recommendations together with the recommendations in Section 10 should ensure that the short term waste management requirements in the region are met. Once the Waste Information System is implemented, this Plan should be re-evaluated and if need be adjusted. Long term planning can then be done in a more responsible manner. This will ensure that sound waste management is practised in the region.

APPENDIX A:
Permit for Prieska landfill

APPENDIX B:
Typical Procedure for Landfill Authorisation